USER MANUAL

VersaCare™ Bed

From Hill-Rom

Product No. P3200 and P3201

Hill-Rom
A HILLENBRAND INDUSTRY

USR119 REV 5

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Manufactured by:
HILL-ROM COMPANY, INC.
1069 STATE ROUTE 46 E
BATESVILLE, IN 47006-9167

Authorized European Union Representative:
HILL-ROM SAS
B.P. 14 - Z.I. DU TALHOUET
56330 PLUVIGNER
FRANCE
TEL: +33 (0)2 97 50 92 12

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To order additional copies of this manual (USR119), refer to the back cover for contact information. For countries not listed on the back cover, contact your distributor.

NOTE:
The back cover is a comprehensive list of Technical Support contact information for Hill-Rom. The product discussed in this manual may not be available in all of the countries listed.

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5	All	April 2005

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Document Symbol Definition

This manual contains different typefaces and icons designed to improve readability and increase understanding of its content. For a list of symbols used on the product, see “Product Symbol Definition” on page 50.

Note the following examples:

- Standard text—used for regular information.
- **Boldface text**—emphasizes a word or phrase.
- **NOTE:**—sets apart special information or important instruction clarification.
- The symbol below highlights a WARNING or CAUTION:

Warning and Caution

  - A WARNING identifies situations or actions that may affect patient or user safety. Disregarding a warning could result in patient or user injury.
  - A CAUTION points out special procedures or precautions that personnel must follow to avoid equipment damage.
- The symbol below highlights a CAUGHT HAZARD WARNING:

Caught Hazard Warning

- The symbol below highlights a CHEMICAL HAZARD WARNING:

Chemical Hazard Warning

- The symbol below highlights an ELECTRICAL SHOCK HAZARD WARNING:

Electrical Shock Hazard Warning

Intended Use

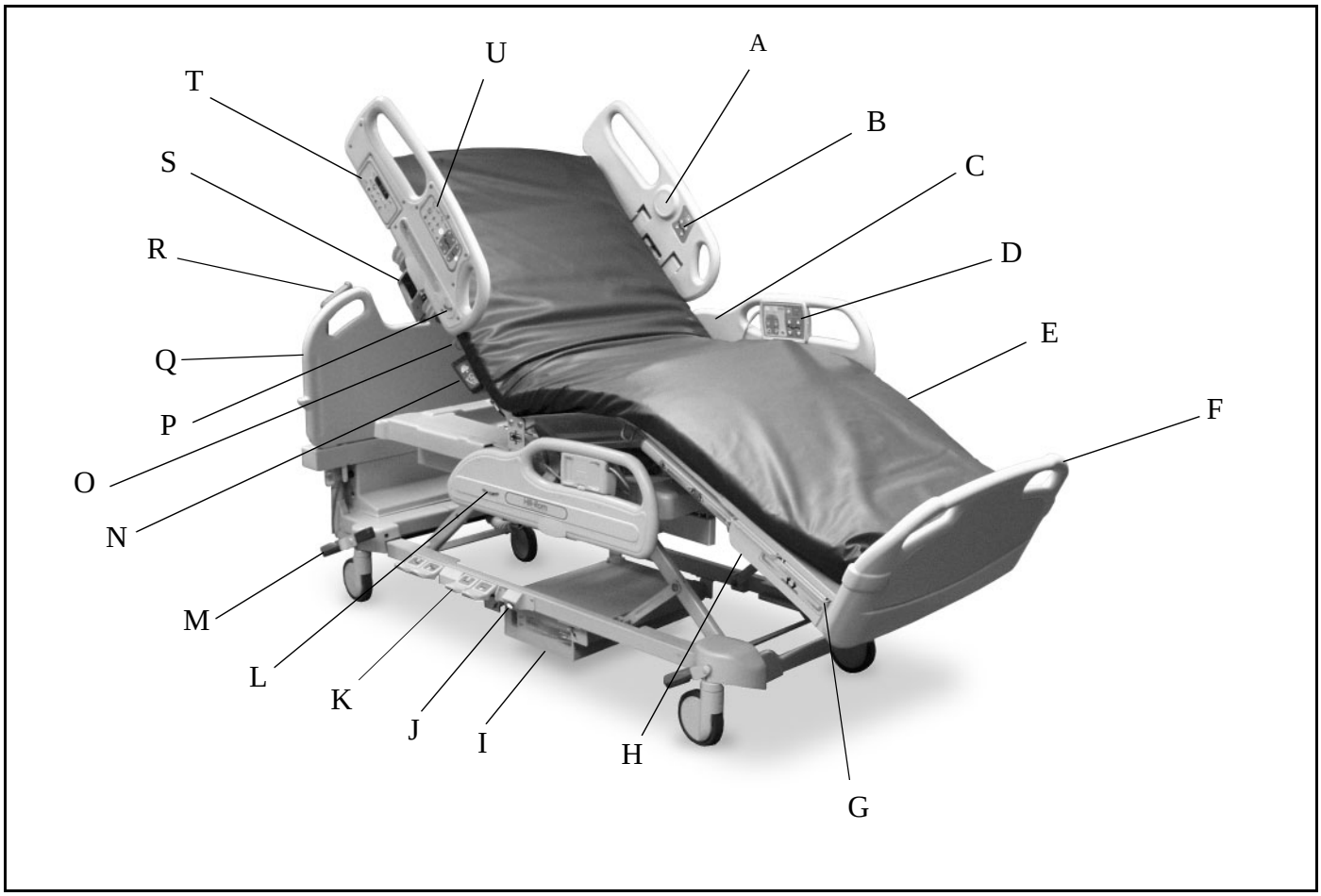
The VersaCare™ Bed is intended for low to moderate acuity patients in the medical/surgical area of the hospital. The VersaCare™ Bed can also be used as a general-purpose variable height hospital bed for general care, post-operative care, and general medicine wards.

Introduction

This manual provides the information required for normal operation of the VersaCare™ Bed from Hill-Rom. Before operating the VersaCare™ Bed, be sure that you have read and understood in detail the contents of this manual. It is important that you read and strictly adhere to the aspects of safety contained in this manual. Any reference to a side of the bed is from the patient's view lying in the bed on his or her back.

Some configurations of the VersaCare™ Bed may be equipped with an integral scale intended to weigh the patient in the bed. The scale may be used for diagnostic or therapeutic purposes as determined by medical professionals, taking into account the scale performance parameters specified in this manual.

Features



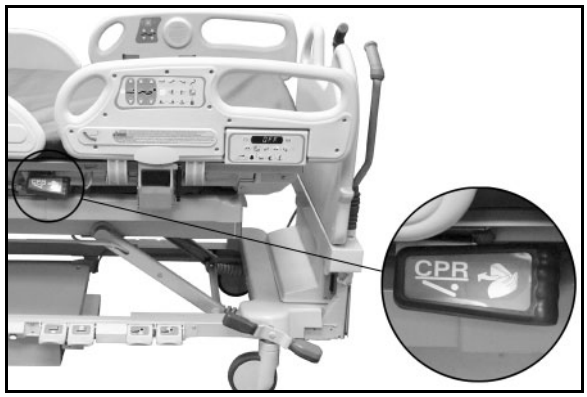
Item	Description	Item	Description
A	Speaker	L	Line-of-Site® Trendelenburg Angle Indicator
B	Patient Siderail Control Panel	M	Point-of-Care® Brake and Steer System
C	Patient Hip Position Indicator	N	CPR/Emergency Trendelenburg Release Mechanism
D	Patient Pendant (Optional)	O	Patient Restraint Point
E	Short Stay Sleep Surface or Treatment Surface (Optional)	P	Line-of-Site® Head Angle Indicator
F	Footboard	Q	Headboard
G	Drainage Bag Holder	R	IntelliDrive® Transport System Handle (Optional)
H	FlexAfoot™ Retractable Foot Mechanism	S	OneStep® Siderail Release Mechanism
I	IntelliDrive® Transport System (Optional)	T	Air System/Scale/Bed Exit Alarm System Control Panel (Optional)
J	Night Light	U	Point-of-Care® Siderail Controls
K	Caregiver Foot Controls		

Standard Features

Emergency CPR

When activated, the CPR release decouples the head section actuator so that the head section may lower to the horizontal position. This function is gas-assisted to cushion the movement and can be used when power is not available. If a treatment surface is installed, it will go into Max-Inflate to support a CPR board. After 30 minutes of Max-Inflate, the treatment surface will go into Pressure Relief mode.

The emergency CPR controls are handles located under the sleep deck, between the head and intermediate siderails on both sides of the bed.



To Activate

1. Pull and hold the handle.
2. Hold the handle until the head and knee section come to a stop in the flat position and the foot section stops raising.
3. Release the handle.

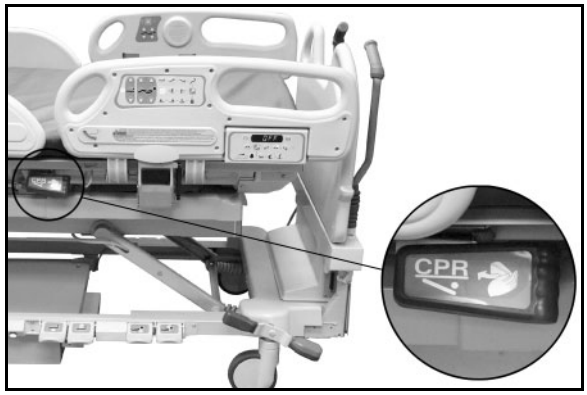
NOTE:
During activation, releasing the CPR control handle will cause the head section to stop lowering.

The head section actuator is automatically re-enabled after the CPR control handle is released.

Emergency Trendelenburg

The emergency Trendelenburg allows the head end of the bed to lower to a maximum inclination of 15°.

The emergency Trendelenburg controls are handles located under the sleep deck, between the head and intermediate siderails on both sides of the bed. They are the **same** controls as the emergency CPR.



The emergency Trendelenburg control works **only** when the bed is connected to AC power or when battery power is activated.

To Activate

1. Make sure the bed is plugged into AC power or the battery is activated.
2. Pull the CPR control handle with one hand.
3. Hold the handle until the head and knee sections come to a stop in the flat position, if not currently in the flat position.
4. Continue to hold the CPR control handle until the desired inclination is reached.

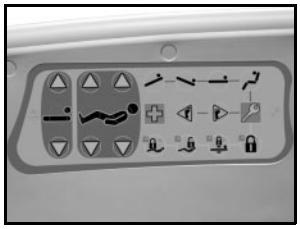
The head section actuator is automatically re-enabled after the CPR control handle is released.

Caregiver Siderail Controls

The Caregiver Siderail controls are located on the outside of each head end siderail.

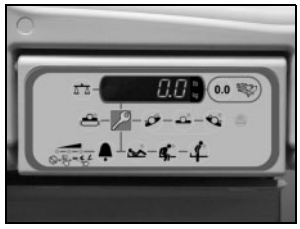
There are two sets of Caregiver Siderail controls. The first set is mounted on the outside of both siderails and control the bed position functions. The second set, for the **optional** bed functions, is mounted on a flip-up control pod in the head end siderails. The second set of controls is for the scale, treatment surface, and the Bed Exit Alarm System.

Instruct visitors not to attempt operation of caregiver controls. They may assist the patient with patient controls.



Standard Caregiver Bed Function Control Panel

Optional Caregiver Bed Function Flip-Up Control Pod (A model)



Optional Caregiver Bed Function Flip-Up Control Pod (B model)

Enable Control

The Enable control is located on the outside of both siderails and on the optional flip-up control pod. The Enable control deters unauthorized operation of certain caregiver controls. The Enable control must be activated before the caregiver controls will operate. When activated, the Enable indicator stays on for 60 seconds. During this time, the caregiver can use any caregiver controls **outside** of the blue section of the caregiver control panel. Controls located **inside** the blue section do not require the Enable control to be activated.

The Enable control **does not** enable the caregiver foot controls.

To Activate

1. Press the Enable control. An indicator illuminates and the Enable control is active for 60 seconds.
2. During the 60-second period, press the desired caregiver control. The 60-second period starts over when another control is pressed.

See “Lockout Control” on page 10 for instructions for using the lockout controls.

The following caregiver controls **do not** require activation of the Enable control: Bed Up/Down, Head Up/Down, Knee Up/Down, and Nurse Call.

Bed Up/Down

Head Up/Down

Knee Up/Down

Nurse Call

Lockout Control

All Motors Lockout

The Lockout controls, located on the caregiver siderail control panel, disable the bed's articulating functions.

To Activate

Simultaneously press and hold the Enable control, and then press the desired lockout control. Both patient and caregiver controls are locked out, including the foot controls. An indicator illuminates when a lockout is active.

Bed Up/Down Lockout

Head Up/Down Lockout

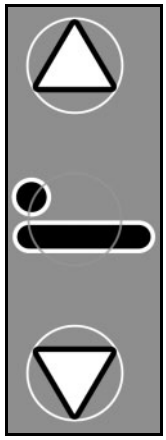
Knee Up/Down Lockout

To Deactivate

Simultaneously press and hold the Enable control, and then press the respective Lockout control. The indicator will go out.

The Lockout control disables all articulation controls except for the emergency CPR.

Bed Up/Down

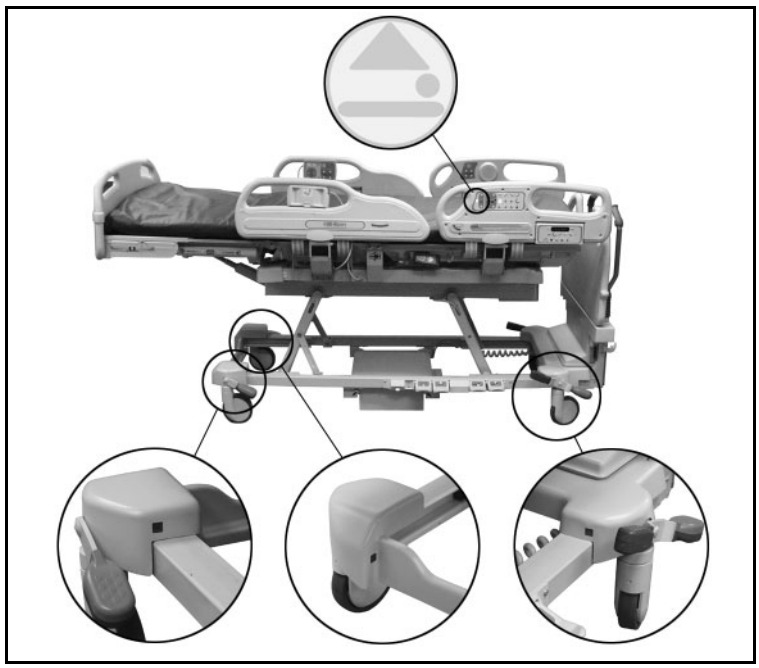


The VersaCare™ Bed adjusts in height from a low position for patient exit to a high position for examination. The Bed Up/Down controls are located on the head end siderails.

To Activate

1. Press and hold the Bed Up control to raise the bed. When the desired height is reached, release the control.
2. Press and hold the Bed Down control to lower the bed. When the desired height is reached, release the control.
3. To disable the Bed Up/Down control, activate the Bed Up/Down Lockout control. See "Lockout Control" on page 10.

Obstacle Detection



The VersaCare™ Bed is equipped with an obstacle detection system that runs along the three open sides of the base frame. This system detects objects that are between the upper frame and the base frame.

If an object is detected while the bed sleep deck is lowering, the bed will stop lowering, and then raise automatically for 2 seconds. The Bed Not Down indicator on both siderails will flash.

If an object is detected before the Bed Down control is pressed, the obstacle detection indicator on both siderails will flash, and the sleep deck will not lower.

Head Up/Down

Using the Head Up/Down controls, the caregiver can adjust the head section to specific angles. There are Line-of-Site® Angle Indicators located in the head end siderails to show the position of the head section.

The maximum travel for the head section is 65°.

To Activate

1. Press and hold the Head Up control to raise the head section. When the desired position is reached, release the control.
2. Press and hold the Head Down control to lower the head section. When the desired position is reached, release the control.

Automatic contour is not active when using the caregiver controls, it is **only** active with the patient controls. See “Automatic Contour” on page 25.

Knee Up/Down

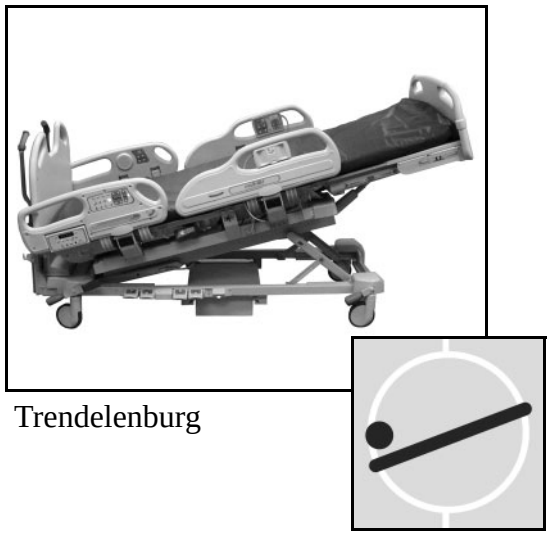
Using the Knee Up/Down control, the caregiver can raise or lower the knee section.

The knee section has a maximum travel of 16°.

To Activate

1. Press and hold the Knee Up control to raise the knee section. Release the control when the desired position is reached.
2. Press and hold the Knee Down control to lower the knee section. Release the control when the desired position is reached.

Trendelenburg and Reverse Trendelenburg



Trendelenburg

The VersaCare™ Bed is capable of 15° Trendelenburg and 10° Reverse Trendelenburg. The Trendelenburg and Reverse Trendelenburg controls can be activated at any bed height.

The Trendelenburg and Reverse Trendelenburg Line-of-Site® Angle Indicators are located in the foot end siderails.

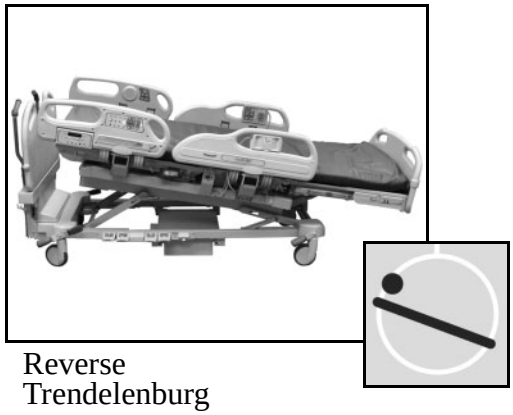
To Activate

1. Press the Enable control.
2. For Trendelenburg, press and hold the Trendelenburg control until the foot end of the bed raises relative to the head end.

   or

   For Reverse Trendelenburg, press and hold the Reverse Trendelenburg control until the head end of the bed raises relative to the foot end.

3. To return to the flat position, press the opposite control (Trendelenburg or Reverse Trendelenburg) or press the Bed Up/Down control until the bed reaches the full up or full down position.



Reverse Trendelenburg

Bed Flat

The Bed Flat controls are provided so that a caregiver can easily return the sleep deck to the flat position (head and knee section down, and foot section up if it is down) from any articulated position. The Bed Flat control returns only the sleep deck to the flat position, it **does not** change the angle of the bed.

To Activate

1. Press the Enable control.
2. Press and hold the Bed Flat control. When all sections are flat, the system stops.

Chair Positioning Controls

⚠ WARNING:
Make sure the area below the foot section, especially if the footboard is removed, is clear of equipment and persons prior to operating the chair control. Failure to do so can result in injury or equipment damage.

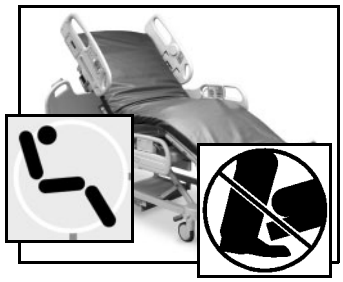
⚠ WARNING:
Do not use mattress overlays while in the chair position. Patient injury or equipment damage may occur.

⚠ WARNING:
Check periodically to make sure that the patient remains in the proper position. The use of pillows can help maintain a side-to-side position. Failure to do so may result in patient injury.

The chair positioning controls are located on the outside of the head end siderails. When activated, the bed will articulate to a maximum of 65° for the head section, 16° for the knee section, and -27° for the foot section.

To Activate

1. Set the brake.
2. Press the Enable control.
3. Press the Chair control. The patient deck transitions to the chair position.



If additional chair inclination is required, use the reverse Trendelenburg control to provide an additional 10° of forward chair movement.

Vascular Position

The vascular position allows the caregiver to place the patient's legs above the level of the patient's sternum.

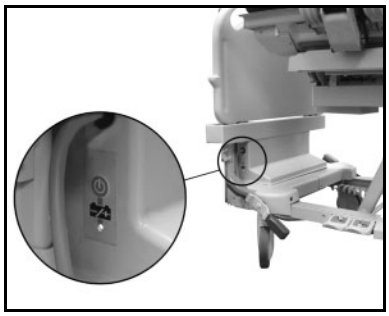
To Activate

1. Lower the head section to the desired position.
2. Raise the knee section to the desired position.
3. Use the Trendelenburg control to position the sleep deck in the desired position.

To Return to the Flat Position

1. Use the Reverse Trendelenburg control to return the bed frame to the horizontal position.
2. Use the Bed Flat control to return the sleep deck to the flat position.

Battery Control



The Battery control is located at the head end of the bed, on the right side, under the headboard just below the power cord.

To Activate

Press the *Battery* control. All functions, except the controls on the control pod, are available. The battery stays active for 10 minutes after the last control is activated.

If the battery charge level is low, an indicator will flash. To recharge the battery, plug the bed into an appropriate power source.

⚠ WARNING:

Keep the bed plugged into the power source until the battery indicator steadily illuminates (charging time is approximately 10 hours). Failure to do so could result in the inability to operate the bed when power is not available.

While the battery is charging, the indicator flashes. When the indicator steadily illuminates the battery is fully charged. When plugged into an appropriate power source and the indicator is not illuminated, the battery has lost all of its charge or is disconnected.

Point-of-Care® Brake and Steer Control

⚠ WARNING:

Unless transporting the patient, always set the brakes when the bed is occupied. Reconfirm that the brakes are set before any patient transfer. Failure to do so may result in personal injury or equipment damage.

The Point-of-Care® Brake and Steer controls are located on the four corners of the bed frame. There are three positions: Brake, Steer, and Neutral. The brake position keeps the bed from moving. The steer position helps move the bed in a straight line. The neutral position allows the bed to be moved sideways in rooms or small enclosed areas.

The head end brake and steer control is a butterfly styled control. Stepping down on either side of the control will activate a brake or steer function. The foot end brake and steer control is a single sided control. Pressing down or lifting up the control will activate a brake or steer function.

To Activate

Head End Control

Foot End Control

Brake (orange control)
Step down on the brake and steer control until it stops.

Neutral
Using your foot, lift or press the brake and steer control until it travels to the middle detent.

Steer (green pedal)
Using your foot, lift or press the brake and steer control to the full up position.

Head and Foot Siderails

⚠ WARNING:

Evaluate patients for entrapment risk according to facility protocol, and monitor patients appropriately.

⚠ WARNING:

Evaluate patients for entrapment risk according to facility protocol, and monitor patients appropriately. Make sure that all siderails are fully latched when in the raised position. Failure to do either of these could result in serious injury or death.

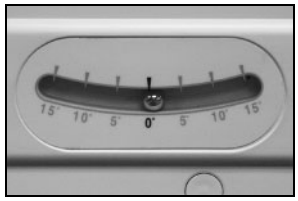
NOTE:
Siderails are intended to be a reminder to the patient of the bed's edges, not a patient-restraining device. When appropriate, Hill-Rom recommends that medical personnel determine the proper methods necessary to make sure a patient remains safely in bed.

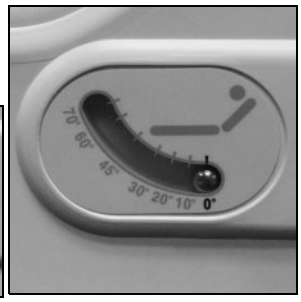
The VersaCare™ Bed siderails have been designed with the OneStep® Siderail Release Mechanism for one-step operation.

Siderails in the raised position are intended to make the patient aware of the proximity of the edge of the sleep surface and to assist in patient entry and exit.

Siderails in the down position, below the patient surface, make a patient’s entry or exit from the bed easier. This design feature also makes it easier for the caregiver to have unobstructed access to the patient.

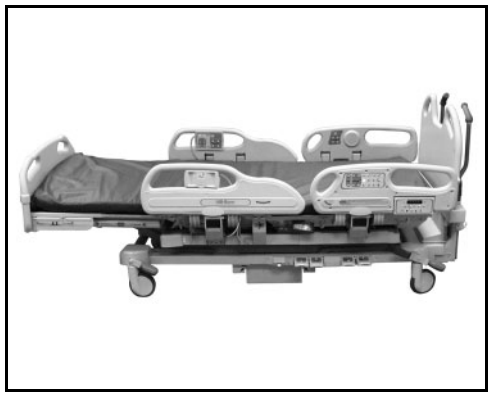
The head end siderails contain the Line-of-Site® Head Angle Indicators. The foot end siderails house the Line-of-Site® Trendelenburg/Reverse Trendelenburg Angle Indicators.





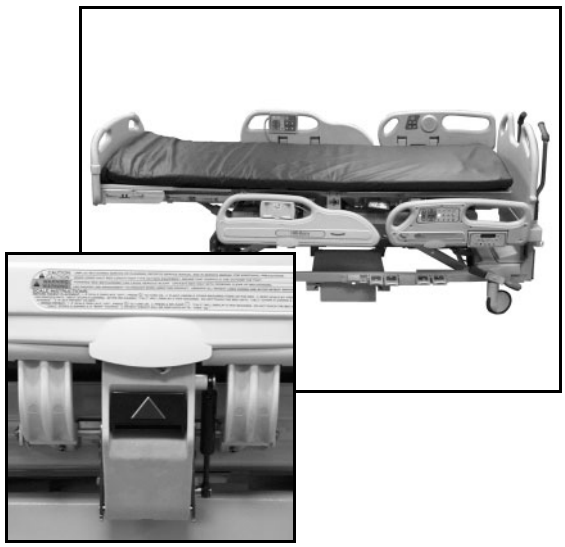
To Raise a Siderail

1. Pull the siderail up until it latches into the locked position. A **click** will be heard when it latches into the locked position.
2. Once the **click** is heard, gently pull on the siderail to make sure it is latched properly.



To Lower a Siderail

Grasp the release handle and pull out. The siderail automatically lowers below the sleep surface perimeter.



Sleep Surfaces

Two types of sleep surfaces can be used with the VersaCare™ Bed: prevention foam and Active Integrated Response™ treatment surface. Both sleep surfaces are uniquely designed to match the contours of the bed frame during all bed functions.

It is recommended to use 84" (213 cm) fitted sheets with the sleep surfaces for the VersaCare™ Bed.

⚠ WARNING:
Some safety features of the VersaCare™ Bed may not function or may not operate as intended with surfaces manufactured by other companies. Check with the surface manufacturer to determine those safety features of the bed that have been tested and verified to work properly with the replacement surface. Failure to do so could result in serious personal injury or damage to equipment.

NOTE:
Hill-Rom recommends the use of Hill-Rom surfaces that have been designed and tested specifically for the VersaCare™ Bed. Customers electing to purchase replacement surfaces from other manufacturers should confirm that the replacement surface, when used in conjunction with the VersaCare™ Bed, meets applicable regulations, regulatory guidance and technical standards and does not create unacceptable risks of injury to patients or caregivers. Specifically, Hill-Rom suggests that surfaces utilize dimensions and construction to minimize gaps where entrapment could occur, provide for sufficient height between the surface and the top of the siderail to prevent accidental roll-over events, provide appropriate firmness at the edges of the surface to facilitate safe transfers into and out of the bed, and do not interfere with the proper operation of siderails.

Prevention Foam Sleep Surface

The prevention foam sleep surface accommodates a patient weight up to 500 lb (227 kg), a width up to 35" (89 cm), and a height between 59" and 84" (150 cm to 213 cm).

The prevention foam sleep surface consists of two parts: the upper section and the lower section. The lower section retracts and extends with the bed and helps to prevent pressure ulcers on the patient's heels. To achieve heel relief, position the patient, then activate the Foot Extend or Foot Retract caregiver control until the heels are properly aligned.

Active Integrated Response™ Treatment Surface

⚠ WARNING:
Contraindication: The Active Integrated Response™ treatment surface is **not** for use with patients who have unstable spinal cords. Patient injury could occur.

The Active Integrated Response™ treatment surface accommodates a patient weight up to 500 lb (227 kg), a width up to 35" (89 cm), and/or a height between 59" and 84" (150 cm to 213 cm). This surface helps to prevent pressure ulcers for patients weighing up to 300 lb (136 kg).

The Active Integrated Response™ treatment surface consists of three air zones and one foam zone. The three air zones control interface pressure in the head and torso, seat, and heel areas of the patient to help prevent pressure ulcers. The foam zone, located between the seat and heel zones, retracts and extends with the bed. The treatment surface has six modes: pressure relief, max-inflate, right turn assist, left turn assist, sleep, and off.

Active Integrated Response™ Surface Controls

Pressure Relief

When the bed is connected to AC electrical power, the system automatically puts the surface into Pressure Relief mode and adjusts the air pressure in the zones according to the patient's size and the head section elevation.The controls are located on the left and right siderail flip-up pod.

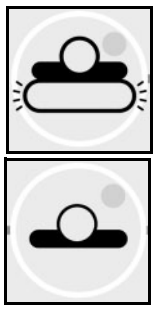
To Activate

1. Press the Enable control.
2. Press and release the Pressure Relief control. An indicator will illuminate when the mode is active.

Max-Inflate

Max-Inflate mode causes the sleep surface to become very firm. This mode should be used for short periods of time such as bed entry, bed exit, or meals. This mode is automatically activated whenever the

Emergency CPR is activated or when the Max-Inflate control is activated. After 30 minutes, if no other mode is selected, the Pressure Relief mode activates automatically.

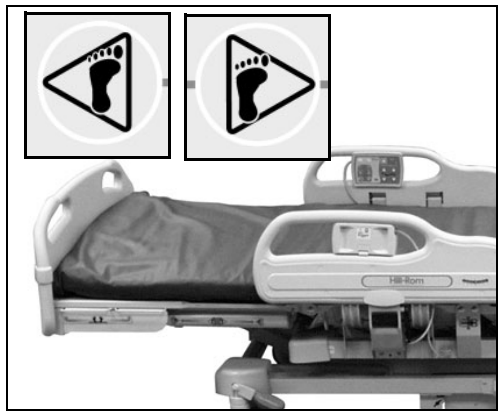


To Activate

1. Press the Enable control.
2. Press and release the Max-Inflate control. An indicator will illuminate when the mode is active.

To Deactivate

Press the Pressure Relief control.



Heel Relief

Heel Relief is achieved by extending or retracting the bed foot section to align the patient's heels in the heel relief zone.

To Activate

- Press the Enable control.
- Press and hold the Foot Extend or Retract control to move the foot section in or out as required.

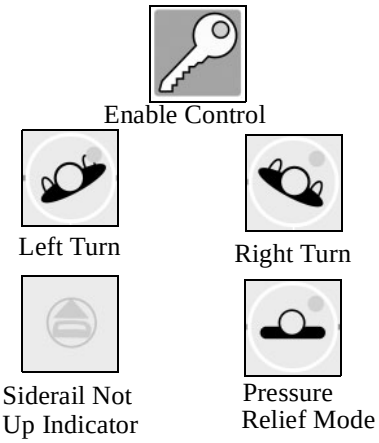
Turn Assist

Turn Assist mode is used to assist caregivers in turning the patient left or right. When this mode is activated, the head and seat bladders will be adjusted. An internal air bladder will inflate to start the turning process. After the patient reaches approximately 20°, it will stabilize for 10 seconds. After the 10 seconds, an alarm will sound and the bladder will quickly deflate. Turn Assist mode assists the caregiver in turning the patient for linen changes, dressing changes, bed panning, back care, or other nursing procedures.

The siderails on the side that the patient is turning toward **must be in the up position**. For instance, if turning the patient right, the right siderails (both head and intermediate) must be up and locked.

To Activate

1. Make sure the head angle is **below** 25°.
2. Make sure the siderails are in the **up and locked position** on the side the patient is turning toward. Turn assist will not start until the siderails are up.



NOTE:
If the siderails are not in the correct position or the head section is not below 25°, an indicator will flash and an alarm will sound.

3. Press the Enable control.
4. Press and release the Left Turn or Right Turn Assist control. The indicator will illuminate.
5. The turn assist bladder will inflate and rotate the patient approximately 20°, which takes about 30 seconds. The system will hold the pressure for **ten seconds**. After ten seconds, an alarm sounds, then the turn assist bladder deflates and returns to Pressure Relief mode.

NOTE:
If the surface is in the Turn Assist mode and a siderail is lowered, a brief alarm will sound to indicate that the patient is at risk of rolling out of the bed.

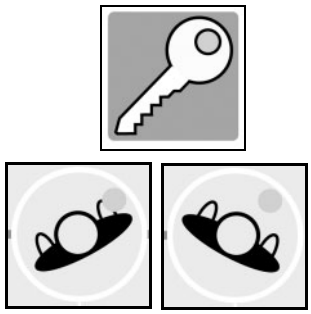
To Deactivate Turn Assist

1. Press the Enable control.
2. Press and release the opposite Turn Assist control, Pressure Relief control, or Max-Inflate control.

Sleep Mode

The Sleep Mode is used to temporarily disable the air system to allow patients who are sensitive to sleep surface movement to sleep. The air pressure in the mattress is monitored, but the air pump does not run unless the air pressure falls below or raises above a preset level. After three hours or eight hours (for beds manufactured after 20-Dec-2004), the Pressure Relief mode reactivates.

To Activate



1. Press the Enable control.
2. Simultaneously press the Left Turn Assist and Right Turn Assist control and hold for 5 seconds. After 5 seconds, the Left and Right Turn Assist indicators will illuminate.

To Deactivate

The bed will automatically go into Pressure Relief mode after three hours or if the mattress pressure requires adjustment.

or

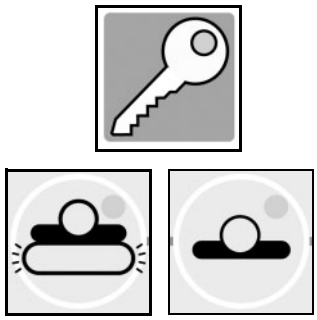
1. Press the Enable control.
2. Press any air system control. The appropriate control will illuminate.

Off Mode

⚠ **WARNING:**
Do not use the Off Mode when a patient is on the bed. Using the Off Mode with a patient on the bed can result in patient injury if Off Mode remains activated for an extended time.

The Off Mode disables the air system to allow for cleaning or maintenance. The Off Mode should not be used with a patient on the bed.

To Activate



1. Press the Enable control.
2. Simultaneously press the Max-Inflate control and Pressure Relief control for 5 seconds. After 5 seconds all air system indicators will go off.

To Deactivate

1. Press the Enable control.
2. Press any air system control. The appropriate control will illuminate.

NOTE:
If the mattress is not present or not installed correctly, an alarm will sound and the indicators will flash. The bed will remain in the Off Mode.

Sleep Surface Removal and Installation

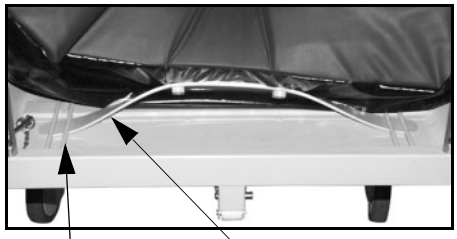
To Remove the Sleep Surfaces

1. Remove the footboard (see “Footboard” on page 21).
2. Lift up on the foot end of the mattress.
3. Slide the mattress to one side or the other.

⚠ WARNING:

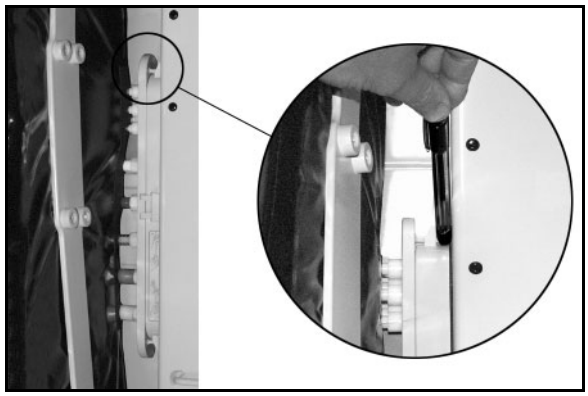
Use extreme care when removing the mattress retaining strap. Failure to do so can cause injury as the strap snaps out of the retainers.

4. Carefully remove one side of the mattress retaining strap from the retainer.
5. Remove the opposite side of the mattress retaining strap from the retainer.
6. Remove the headboard (see “Headboard” on page 21).
7. Carefully remove one side of the mattress retaining strap from the retainer.
8. Remove the opposite side of the mattress retaining strap from the retainer.
9. For foam sleep surfaces, remove the mattress.



10. For air surfaces, do the following:

    Insert a small screwdriver between the surface hose connector and the bed hose connector latch tabs on each end of the connector. The end of the surface hose connector will pop out of the bed hose connector.



11. Remove the treatment surface from the bed.

To Install The Sleep Surfaces

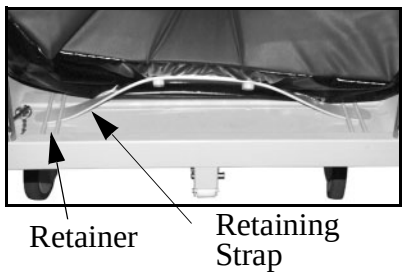
⚠ WARNING:

Make sure the treatment surface is installed properly. Failure to do so could cause the air system to improperly operate and thus not support the patient, possibly resulting in patient injury.

When installing the treatment surface, make sure it is fully seated within the frame of the bed and in the correct position (head to foot). Make sure the mattress interface connector is fully engaged with the mating connector at the top of the head deck section. Make sure the retaining strap under both ends of the mattress is secured in the head and foot section retainers.

For a **foam sleep surface**, do the following:

1. Place the surface on the bed.
2. At the foot end, install one side of the mattress retaining strap into the retainer.
3. Install the opposite side of the mattress retaining strap into the retainer.
4. At the head end, install one side of the mattress retaining strap into the retainer.



5. Install the opposite side of the mattress retaining strap into the retainer.

For an **air surface**, do the following:

1. Place the mattress on the bed.
2. On the foot end, install one side of the mattress retaining strap into the retainer.
3. Install the opposite side of the mattress retaining strap into the retainer.
4. On the head end, press the hose connector into the air manifold connector in the bed frame until it snaps in place.
5. Install one side of the mattress retaining strap into the retainer.
6. Install the opposite side of the mattress retaining strap into the retainer.

NOTE:
After installing a new treatment surface, it is recommended to run the Max-Inflate mode for 3 to 5 minutes or until the air bladders fill.

Surface Overlays

⚠ WARNING:
Do not use mattress overlays while in the chair position. Patient injury or equipment damage may occur.

The recommended overlay for the VersaCare™ Bed is the ACUCAIR® Continuous Airflow System. For operating instructions, refer to the instructions on the ACUCAIR® Continuous Airflow System control unit.

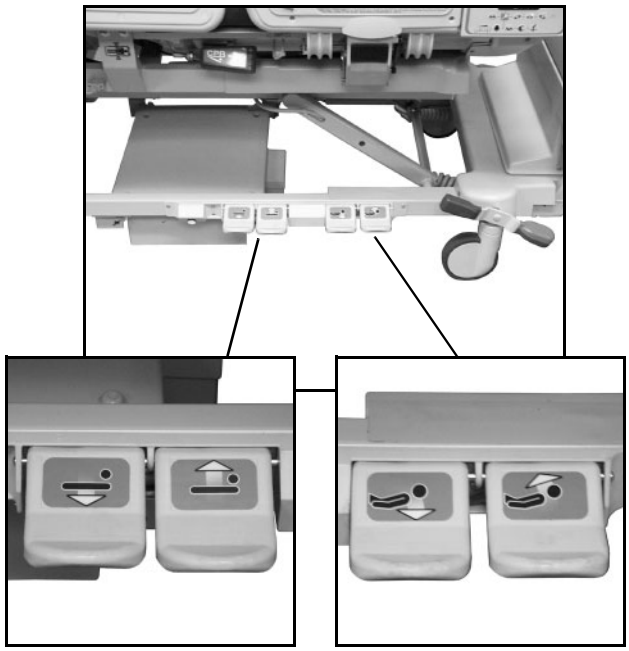
Foot Controls

The foot controls are pedals located on each side of the base frame. The foot controls let the caregiver raise and lower the bed, and raise and lower the head section of the bed without using the siderail controls.

The foot controls have a built in Enable control that requires activation before operation. This Enable control **does not** enable the siderail controls, only the foot controls.

To Activate

1. Step down on any pedal (Head Up, Head Down, Bed Up, or Bed Down) for 1 to 3 seconds.
2. Release the pedal.
3. Step down on the pedal of the desired function until the desired position is reached.



Bed Up/Down Head Up/Down

Headboard

The headboard is located at the head end of the bed. It attaches to the head end of the frame, and **does not** articulate with the sleep deck.

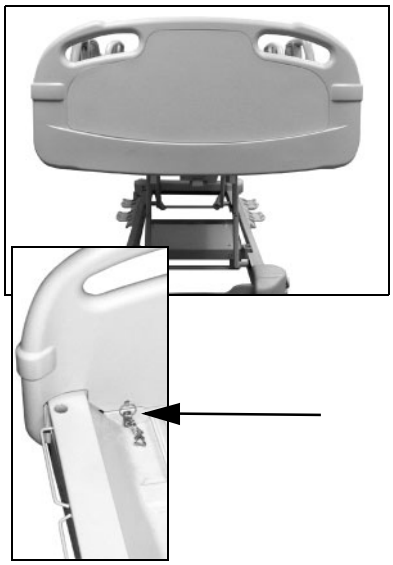
The headboard can be removed for increased access to the patient's head.

A caregiver can quickly remove or attach the headboard in a single step without the use of tools.

To Remove and Install

- To remove, grasp the headboard and lift straight up.
- To install, position the headboard pins over the sockets in the frame and then lower the headboard into the sockets. Push the headboard down until the bottom rests on the frame.

Footboard



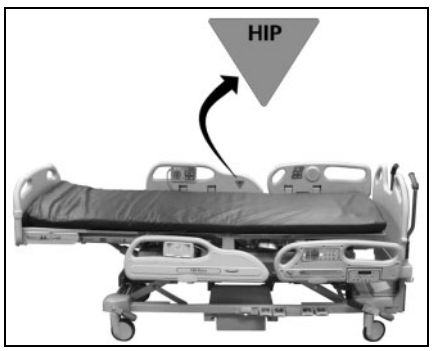
The footboard is located at the foot end of the bed. It attaches to the articulating foot section and remains perpendicular to the surface of the foot section at all times. The footboard protects the patient during transport and room docking.

A caregiver can quickly remove or attach the footboard without the use of tools.

To Remove/Install

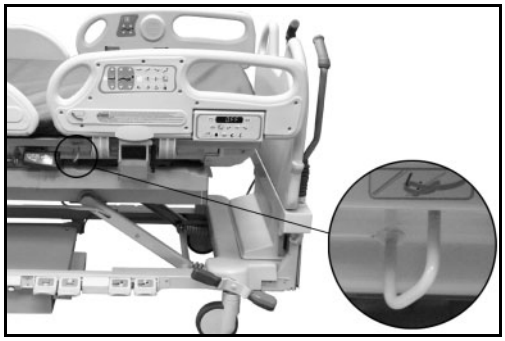
- Remove the retaining pin on the inside of the footboard (left side).
- Grasp the handles on the footboard and lift straight up.
- To install, insert the pins of the articulating frame into the sockets in the footboard. Push the footboard down until it rests on the deck.
- Install the retaining pin in the footboard.

Patient Hip Position Indicator



The patient hip position indicator is located on the inside of the intermediate siderails. The indicator is used to help make sure the patient is in the most ergonomic position.

Patient Restraints



⚠ WARNING:
Patient restraints are not intended as substitutes for good nursing practices. Physical restraints, even properly installed, can result in entanglement, physical injury, and death, particularly with agitated and disoriented patients. Monitor patients when using physical restraints in accordance with legal requirements and facility protocol.

⚠ WARNING:
Restraints must be attached to the articulating sections of the system at the correct attachment points. Failure to do so may result in patient injury.

⚠ WARNING:
Never use ankle restraints in a chair position or when the foot section is retracted. Patient injury or equipment damage could occur.

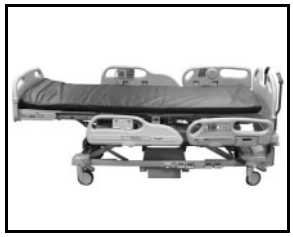
The VersaCare™ Bed facilitates the use of vest, wrist, waist, and ankle restraints. Hill-Rom makes no recommendation regarding the use of physical restraints. Users should refer to legal restrictions and appropriate facility protocols before physical restraints are used.

Foot Extend and Retract

⚠ WARNING:
Do not use ankle restraints when activating this feature. Injury to the patient may result.

⚠ WARNING:
The retractable foot section provides multiple patient benefits. However, a retracted foot section may increase the risk of patient entanglement between the siderails and footboard for certain patients. If a potential for entanglement exists, such as with patients who are agitated or disoriented, or who lack the physical strength to extract themselves should they become entangled, the foot section should be left fully extended when the patient is not under direct supervision.

The Foot Extend control allows the foot section to extend approximately 12" (30 cm) to accommodate various patient heights. The Foot Extend control is located on both head end siderails.



Fully extended

To Extend the Foot Section

1. Press the Enable control.
2. Press the Foot Extend control.
3. Release the control when the desired position is reached.

Fully retracted

To Retract the Foot Section

1. Press the Enable control.
2. Press the Foot Retract control.
3. Release the control when the desired position is reached.

Drainage Bag Holders

There are two drainage bag holders mounted on the foot end of the bed. The safe working load is 5.5 lb (2.5 kg).

⚠ CAUTION:

Do not exceed the 5.5 lb (2.5 kg) weight capacity.

⚠ WARNING:

Do not tie restraints to the primary drainage bag holders. Patient injury could result.

The holders accommodate any combination of the following drainage devices:

- Fecal incontinence bag
- 250/2000 ml Foley collection bag
- PLEUR-EVAC®[1] on foot end holders (during transport only)

When the bed is docked, place the PLEUR-EVAC® device or other chest drainage devices on the floor, clear of the bed to allow space for bed articulation.

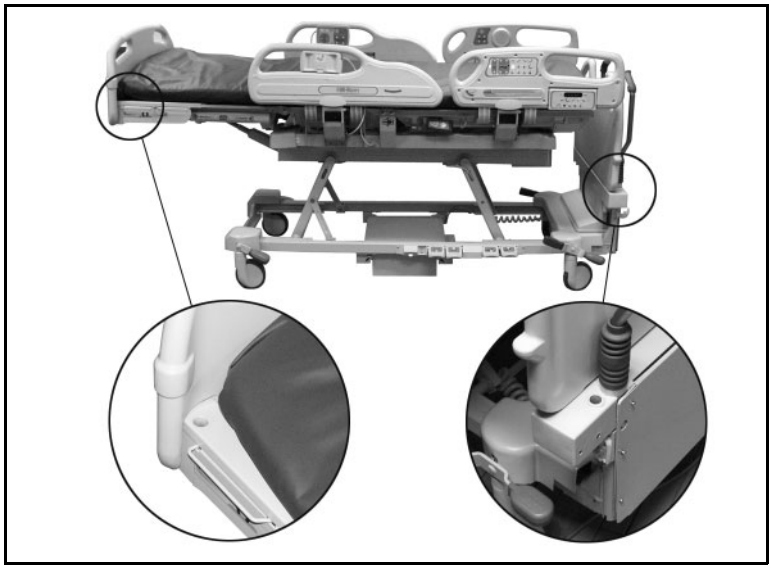
1. Pleur-Evac® is a registered trademark of Deknatel, Inc.

Equipment Sockets

There are four equipment sockets for the attachment of accessories. They are located at each corner of the bed.

The equipment sockets can be used to mount IV poles, ISS poles, traction equipment, and oxygen tank holders.

NOTE:
The head end equipment socket does not move with the bed frame.



Night Light

The night light is located on the base frame, next to the foot controls. There is one night light on each side of the bed.

The light is on continuously when the bed is plugged into electrical power.

Patient Controls

Standard Patient Controls

The patient controls are located in the head end siderails.

The standard patient controls include: Head Up/Down and Knee Up/Down. They operate in the same manner as the caregiver siderail controls.

If the caregiver has locked out a bed function, that same function is locked out on the patient control panel.

NOTE:
The caregiver should take time to familiarize the patient with the proper usage of the controls.

Automatic Contour

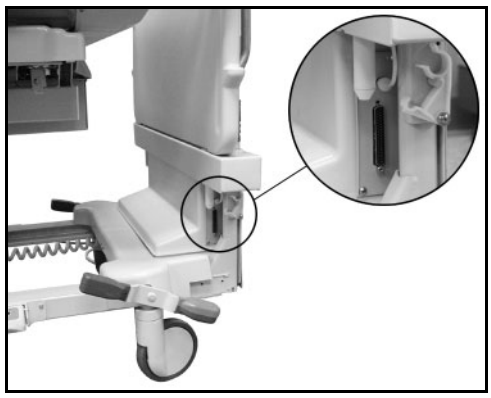
The automatic contour feature (automatic comfort level positioning) is activated by using the **patient** Head Up controls.

The automatic contour feature raises the head section and the knee section simultaneously, preventing the patient from sliding down in the bed. The knee section maximum travel of 16° will be reached before the head section reaches 45°.

The automatic contour feature is only available when both the head section and knee section are not locked out. If only the head section is locked out, the knee section can still be activated by the patient control.

Optional Features

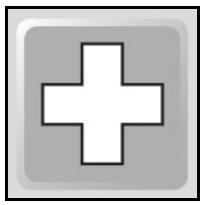
SideCom® Communication System



The SideCom® Communication System provides the following controls: Nurse Call, Entertainment, and Lighting.

The SideCom® Communication System connector is located on the left side of the bed at the head end of the bed.

Nurse Call Control



The Nurse Call control is located on the outside and inside of the head end siderails and on the patient pendant.

When a Nurse Call control is activated, a signal is sent to the nurses station, and an indicator illuminates on the control switch. Voice communication is provided through a speaker/microphone located on the inside of both head end siderails.

To Activate

1. Press a Nurse Call control.
2. When the nurses station acknowledges the nurse call, the indicator next to the Nurse Call control will flash.
3. When the nurses station communication line is open, the indicator will stop flashing and will illuminate continuously.
4. Speak into the speaker/microphone located on the inside of the head end siderails.

NOTE:
The Enable control **does not** need to be activated prior to pressing a Nurse Call control. The Nurse Call controls are always active. The Nurse Call controls cannot be locked out.

Patient Pendant

To Install the Pendant into the Siderail

1. Position the pendant next to the opening in the intermediate siderail.
2. Insert the top edge of the pendant into the siderail so it engages the upper section of the siderail.
3. Rotate the lower edge of the pendant in until it **clicks** into position inside the siderail.

To Remove the Pendant from the Siderail

1. Gently pull on the lower edge of the pendant until it pops out of the siderail.
2. Remove the pendant from the siderail.

To move the pendant from one siderail to the other, the control cable must be moved from one side of the bed to the other. It is recommended to have facility maintenance personnel do this procedure.

Scale System (Non-OIML beds only)

The scale system for the VersaCare™ Bed has an accuracy of 1% and an operating range of 0 lb to 500 lb (0 kg to 227 kg). The scale display and controls are located on the flip-up control pod on the head end siderails.

The scale is very sensitive. The weight reading will be most accurate if the bed is not touching anything. This includes the headwall, lines such as pendant controls, ventilators, or drainage bags. Anything that affects the weight on the bed even slightly will cause an incorrect weight to appear on the display.

Bed Set-Up

For best results, do the following before placing the patient on the bed:

1. Make sure the bed is plugged into electrical power.
2. Put all linens, blankets, pillows, equipment, and other items on the bed. A list of these items posted near the bed may be helpful for future reference.
3. Make sure none of the items on the bed are touching the headboard.
4. Make sure the bed is not touching anything that could affect the patient weight (headwall, lines such as pendant controls, ventilators, or drainage bags).
5. Zero the scale, see “Zeroing the Scale” on page 27.

The scale system is now ready to weigh.

Scale Display On/Off

The scale system continuously weighs the patient, but the display is "OFF." When ready to take a reading, press the Enable control and the display will become active and show 4 dashes "----." The Weigh and Zero controls are now available. The scale display will automatically turn off after 1 minute of no activity.

A model shown

Zeroing the Scale

The bed must be zeroed before the patient is put on the bed. Be sure to put **all** linens, pillows, and equipment on the bed before zeroing.

To Activate

1. Press the Enable control.
2. Press and hold the Zero control until 00.0 is shown (HOLD will be displayed until 00.0 is displayed), and then release the control.

NOTE:
After releasing the Zero control, the scale display will show “CALC.” Do not touch the bed until the display stops flashing “CALC” and displays “0.0.”

The maximum displayed weight of 500 lb (227 kg) will be reduced if more than 20 lb (9 kg) of equipment is zeroed on the bed. If 50 lb (22.7 kg) is on the bed when zeroed, the maximum displayed weight will be 450 lb (204.1 kg). The scale display will blink the bed weight when the maximum weight is exceeded.

Weighing the Patient

A model shown

Before weighing the patient, make sure of the following:

- All items on the list defined in “Bed Set-up” section are accounted for.
- No drainage bags or equipment has been added.
- The patient is lying still and is centered on the mattress.

To Activate

1. Press the Enable control.
2. Press the Weigh control.

On release of the Weigh control, the bed gets the current patient weight. It is shown in lb for 10 seconds, then kg for 5 seconds and then repeats.

Scale System (OIML beds only)

The scale system for the VersaCare™ Bed has a maximum error of .25 kg from 10 kg through 250 kg. The scale display and controls are located on the flip-up control pod on the head end siderails.

The scale is very sensitive. The weight reading will be most accurate if the bed is not touching anything. This includes the headwall, lines such as pendant controls, ventilators, or drainage bags. Anything that affects the weight on the bed even slightly will cause an incorrect weight to appear on the display.

Bed Set-Up

For best results, do the following before putting the patient on the bed:

1. Make sure the bed is plugged into electrical power.
2. Put all linens, blankets, pillows, equipment, and other items on the bed. A list of these items posted near the bed could be helpful for future reference.
3. Make sure the bed is not touching anything that could affect the patient weight (headwall, lines such as pendant controls, ventilators, or drainage bags).
4. Tare/Zero the scale, see “Tare/Zeroing the Scale” on page 29.

Scale Display On/Off

Weight Stable Indicator

The scale system continuously weighs the patient, but the display is blanked with four dashes "----" until ready to take a scale reading. When ready to take a reading, press the **Enable control** and the display will become active. The weight stable indicator will illuminate when the scale has settled. The scale display will automatically turn off after 1

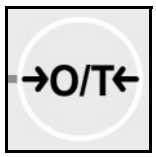
minute of no activity of any caregiver control. The display will show four dashes "----" if the **bed** is more than 2 degrees from level. When the **bed** is within 2 degrees of level, the display will show the weight.

Tare/Zeroing the Scale

The bed must be tared before placing a patient on the bed. Be sure to put **all** linens, pillows, and equipment on the bed before using tare/zero.

To Activate

1. Press the Enable control.
2. Press and hold the Tare/Zero control until the display stops flashing “0.0” and then release the button.



NOTE:
After releasing the Tare/Zero control, the scale display will show “CALC.” Do not touch the bed until the display stops flashing “CALC” and shows “0.0.”

The maximum displayed weight of 250 kg will be reduced if more than 10 kg of equipment is zeroed on the bed. If 50 kg is on the bed when zeroed, the maximum displayed weight will be 200 kg. The scale display will flash the bed weight when the maximum weight is exceeded.

The product scale system has an e=0,5 kg and an operating range of 10 kg to 250 kg.

Bed Exit Alarm System (A model beds) (Non-OIML beds only)

⚠ WARNING:
The Bed Exit Alarm System is not intended as a substitute for good nursing practices. The Bed Exit Alarm System must be used in conjunction with a sound risk assessment and protocol.

The Bed Exit Alarm System control is located on the flip-up control pod on the outside of the head end siderails.

The Bed Exit Alarm System should be used with treatment surfaces in the Pressure Relief or sleep mode only. It should not be used with Max-inflate, turn assist, or Off modes.

The Bed Exit Alarm System has three modes: Patient Position, Bed Exiting, and Out-of-Bed.

Patient Position Mode

The Patient Position mode alarms when the patient moves towards either siderail or moves away from the head section, such as sits up in bed. This mode should be used when a caregiver wants to be alerted when the patient begins to move.

When the system is armed and it detects the patient moving towards either siderail or away from the head section, the following will occur:

- An audible alarm sounds.
- The Patient Position mode indicator flashes.
- A priority nurse call is sent. The light and alarm continue until the system is turned off, even if the patient lies down on the bed again.

Bed Exiting Mode

The Bed Exiting mode alarms when a patient moves away from the center of the bed towards an egress point. This mode should be used when a caregiver wants to be alerted when a potential egress is attempted.

When the system is armed and it detects the patient moving towards an exit point, the following will occur:

- An audible alarm sounds
- The Bed Exiting mode indicator flashes
- A priority nurse call is sent. The light and alarm continue until the system is turned off, even if the patient lies down on the bed again.

Out-of-Bed Mode

The Out-of-Bed mode alarms when the patient's weight shifts significantly off the frame of the bed. This mode should be used when a caregiver wants the patient to move freely within the bed, but to be alerted when the patient leaves the bed.

When the system is armed and it detects movement off the bed, the following will occur:

- An audible alarm sounds.
- The Out-of-Bed mode indicator flashes.
- A priority nurse call is sent. The light and alarm continue until the system is turned off, even if the patient lies down on the bed again.

To Activate

1. Make sure the patient is centered in the bed and aligned with the hip locator.
2. Press the Enable control until the indicator illuminates.
3. Press the desired mode control. When the system beeps one time and the indicator stays on solid, the system is armed.

NOTE:
The indicator flashes until the system is armed.

Patient Position Mode

Bed Exiting Mode

Out-of-Bed Mode

If the system does not arm, the system will beep rapidly for a few seconds and the selected mode indicator will flash and then turn off. This means the patient weighs less than 70 lb (31.8 kg) or more than 500 lb (227 kg) or the patient is not correctly positioned or the system has malfunctioned.

To Reset or Deactivate

1. Press the Enable control until the indicator illuminates.
2. Press any Bed Exit mode control until the indicator goes off.

To Adjust the Alarm Volume

1. The patient must be on the bed.
2. The system is armed.
3. Press the Enable control until the indicator illuminates.
4. Press and release the Volume control until the desired indicator illuminates next to the volume setting.

To Change the Alarm Tone

1.Activate one of the Bed Exit Alarm System modes. It is recommended to use another caregiver instead of a patient to activate the Bed Exit Alarm System mode.

2.Activate the alarm by having the caregiver exit the bed.

3.Press and hold the Volume control.

4.While pressing the Volume control, press the Out-of-Bed control.

5.Press and release the Out-of-Bed control until the desired tone is reached.

6.Clear the alarm condition.

Zeroing the Bed Exit Alarm System (Beds with a Scale Display)

The bed exit alarm system should be zeroed before putting the patient on the bed. Be sure to put **all** linens, pillows, and equipment on the bed before zeroing.

To Zero

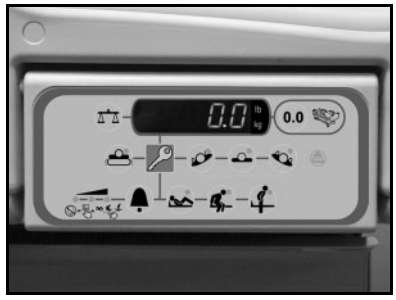
1. Make sure the patient is not on the bed.
2. Press the Enable control.
3. Press and hold the Zero (0.0) control for 1 second. Release the control pod. When system beeps, it is zeroed.

Zeroing the Bed Exit Alarm System (Beds without a Scale Display)

The bed exit alarm system should be zeroed before putting the patient on the bed. Be sure to put **all** linens, pillows, and equipment on the bed before zeroing.

1. Make sure the patient is not on the bed.
2. Press the Enable control.
3. Press and hold the Volume control for 5 seconds. The Bed Exit Alarm System indicators will flash.
4. When the indicators stop flashing, continue to press the Volume control and press the Out-of-Bed control for 5 seconds.
5. Release both controls. All indicators will flash. When the indicators go off and the system beeps one time, it is zeroed.

Bed Exit Alarm System (B model and newer beds) (Non-OIML beds only)



⚠ WARNING:

The Bed Exit Alarm System is not intended as a substitute for good nursing practices. The Bed Exit Alarm System must be used in conjunction with a sound risk assessment and protocol.

The Bed Exit Alarm System control is located on the flip-up control pod on the outside of the head end siderails.

The Bed Exit Alarm System should be used with treatment surfaces in the Pressure Relief or sleep mode only. It should not be used with Max-inflate, turn assist, or Off modes.

The Bed Exit Alarm System has three modes: Patient Position Mode/Patient Movement Mode, Bed Exiting, and Out-of-Bed.

Patient Position Mode/Patient Movement Mode

The Patient Position Mode/Patient Movement Mode alarms when the patient moves towards either siderail or moves away from the head section, such as sits up in bed. This mode should be used when a caregiver wants to be alerted when the patient begins to move. (In some cases this is referred to as Patient Movement Mode).

When the system is armed and it detects the patient moving towards either siderail or away from the head section, the following will occur:

- An audible alarm sounds.
- The Patient Position Mode/Patient Movement Mode indicator flashes.
- A priority nurse call is sent. The light and alarm continue until the system is turned off, even if the patient lies down on the bed again.

Bed Exiting Mode

The Bed Exiting mode alarms when a patient moves away from the center of the bed towards an egress point. This mode should be used when a caregiver wants to be alerted when a potential egress is attempted.

When the system is armed and it detects the patient moving towards an exit point, the following will occur:

- An audible alarm sounds.
- The Bed Exiting mode indicator flashes.
- A priority nurse call is sent. The light and alarm continue until the system is turned off, even if the patient lies down on the bed again.

Out-of-Bed Mode

The Out-of-Bed mode alarms when the patient's weight shifts significantly off the frame of the bed. This mode should be used when a caregiver wants the patient to move freely within the bed, but to be alerted when the patient leaves the bed.

When the system is armed and it detects movement off the bed, the following will occur:

- An audible alarm sounds.
- The Out-of-Bed mode indicator flashes.
- A priority nurse call is sent. The light and alarm continue until the system is turned off, even if the patient lies down on the bed again.

To Activate

1. Make sure the patient is centered in the bed and aligned with the hip locator.
2. Press the Enable control until the indicator illuminates.
3. Press the desired mode control. When the system beeps one time and the indicator stays on solid, the system is armed.

NOTE:
The indicator flashes until the system is armed.

Patient Position Mode/Patient Movement Mode

Bed Exiting Mode

Out-of-Bed Mode

If the system does not arm, the system will beep rapidly for a few seconds and the selected mode indicator will flash. This means the patient weighs less than 50 lb (23 kg) or more than 500 lb (227 kg), the patient is not correctly positioned, or the system has malfunctioned.

To Reset or Deactivate

1. Press the Enable control until the indicator illuminates.
2. Press any mode control until the indicator goes off.

To Adjust the Alarm Volume

1. The patient must be on the bed.
2. The system is armed.
3. Press the Enable control until the indicator illuminates.
4. Press and release the Volume control until the desired indicator illuminates next to the volume setting.

To Change the Alarm Tone

1. Activate one of the Bed Exit Alarm System modes. It is recommended to use another caregiver instead of a patient to activate the Bed Exit Alarm System mode.
2. Activate the alarm by having the caregiver exit the bed.
3. Press and hold the Volume control.
4. While pressing the Volume control, press the Out-of-Bed control.
5. Press and release the Out-of-Bed control until the desired tone is reached.
6. Clear the alarm condition.

Zeroing the Bed Exit Alarm System

The bed exit alarm system must be zeroed before putting the patient on the bed. Be sure to put **all** linens, pillows, and equipment on the bed before zeroing.

To Zero

1. Make sure the patient is **not** on the bed.
2. Press the *Enable* control.
3. Press and hold the *Zero* (0.0) control for 1 second. Release the control pod. When system beeps, it is zeroed.

Scale Beds

Non-Scale Beds

NOTE:
If all three bed exit alarm system control indicators are flashing, zero the bed exit alarm system.

IntelliDrive® Transport System

The IntelliDrive® Transport System option is a permanently attached power driven mechanism built into the bed. This mechanism deploys or stows based on the position of the brake/steer control and AC power availability. It is activated by applying pressure to the transport handles located at the head end of the bed. This allows the caregiver to propel the bed during patient transport with minimally applied force.

⚠ WARNING:
If the bed propels forward or reverse when depressing one of the enable switches and not applying pressure on either of the handles, do not use the IntelliDrive® Transport System. Contact Hill-Rom for repair. Failure to do so can result in personal injury or equipment damage.

⚠ WARNING:
If the bed propels forward or reverse when applying pressure on either of the handles and not pressing either of the enable switches, do not use the IntelliDrive® Transport System. Contact Hill-Rom for repair. Failure to do so can result in personal injury or equipment damage.

⚠ WARNING:
If the bed is stopped on a ramp, or a patient is left unattended, set the brake to avoid unwanted bed movement. Failure to do so can result in personal injury or equipment damage.

⚠ WARNING:

Significantly reduce the speed of travel when powering a bed that has freestanding equipment attached such as portable IV poles. Failure to do so can result in personal injury or equipment damage.

⚠ CAUTION:

The powered transport system is intended for indoor use only. Outdoor use may cause temporary or permanent damage to the powered drive mechanism and/or drive belt.

To Prepare the Bed for Transport

1. Raise all four siderails to the up and locked position.
2. Adjust the head position to make sure the view is unobstructed from the head end of the bed.
3. Secure all equipment being transported with the bed such as monitors, oxygen tanks, and IV poles.
4. Make sure the transport handles are up and locked in position.

To Activate

1. Unplug, and stow, the AC power cord from its power source.
2. Set the brake/steer control to steer.

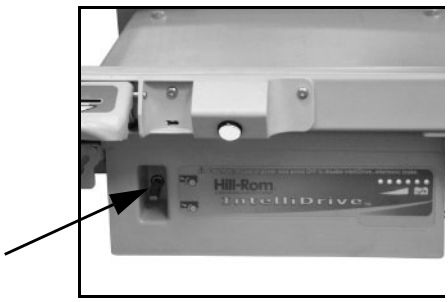
NOTE:
Unplugging the bed and putting it in steer mode will automatically deploy the drive wheel, but not power the powered drive system.

3. Grip one or both of the transport handles located at the head end of the bed.
4. Depress at least one of the enable switches on the inside of the grips of the transport handles.
    - Depressing an enable switch engages the drive wheel on the bed so it can move when pressure is applied to the handles.
    - Depressing the enable switch will not cause the bed to start moving if there is no pressure applied to the handles.
5. Push the transport handles forward to start forward movement or pull them toward you to start reverse movement.
    - Pressure sensors located in the transport handles sense the applied pressure and activate the motor to propel the bed in the direction of the applied pressure.
    - The amount of pressure applied to the handles will regulate the speed of the bed. Increasing the forward applied pressure will move the bed forward faster. Maximum forward speed is between 2.5 mph and 4.0 mph (4.0 km/h to 6.4 km/h) on level flooring. Increasing the reverse applied pressure, will move the bed in reverse faster. Maximum reverse speed is between 1.0 mph and 2.5 mph (1.6 km/h to 4.0 km/h) on level flooring.
6. Decreasing pressure on the transport handles will slow the bed.
7. Releasing the enable switch(es) on the transport handles will cause the bed to stop.

⚠ WARNING:

In case of battery or motor power loss, toggle the electronic brake switch to OFF. This permits manual movement of the bed with a deployed, unpowered system.

An electronic brake switch is located on the right side of the drive housing. If during a transport, the battery fails or there is a loss of motor power, toggle the electronic brake switch to OFF. This permits manual movement of the bed with the drive mechanism deployed. Reset the switch at the destination, and inform facility maintenance of the condition.



To Deactivate

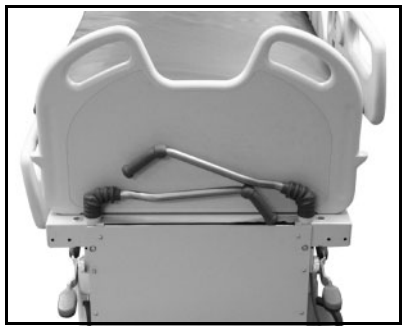
- Set the brake/steer control to neutral or brake.

  or

- Plug the bed into an appropriate AC power source.

To Stow the Transport Handles

1. Grasp the handles and lift upwards to unlock them.
2. Swing the handles inward toward the center of the bed into the stowed position.



The batteries are charged when the AC power cord is plugged into a wall outlet; therefore, plug the AC power cord into a wall outlet whenever possible.

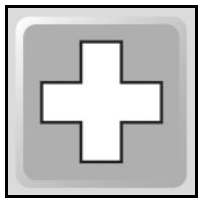
Optional Patient Controls

The optional patient controls are located on the patient pendant.

NOTE:
The caregiver should take time to familiarize the patient with the correct usage of the controls.

NOTE:
The optional controls require the bed to be connected to a facility equipped with the SideCom® Communication System.

Nurse Call



The Nurse Call control is located on the inside of the head end siderails and on the patient pendant. The patient Nurse Call control functions in the same manner as the caregiver Nurse Call control (see “Nurse Call Control” on page 26).

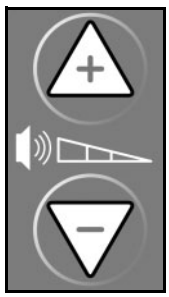
Room Light

The Room Light control lets the patient turn the room light off and on.

Reading Light

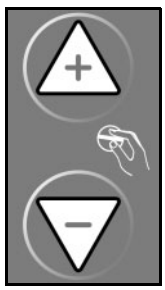
The Reading Light control lets the patient turn the reading light off and on.

Volume Control



The Volume control lets the patient adjust the volume of the television or radio in the room.

Channel Control



The Channel control lets the patient change channels on the television or stations on the radio in the room.

Music Control

The Music control lets the patient turn on and off the radio in the room. The volume and station are controlled by the same control as the television control.

Television Control

The Television control lets the patient turn on and off the television in the room. The volume and channel are controlled by the same controls as the Music control.

Closed Captioning

The Closed Captioning control lets the patient turn on and off the closed captioning option on the television (if the television is closed captioning capable).

Accessories

For a list of the accessories for the VersaCare™ Bed, see “Accessories” on page 39.

Accessories

Part Number	Description
P2217	IV Pole
P158	Infusion Support System
P276	Oxygen Tank Holder, E-size
P844E48	Patient Helper Adapter Bracket
P3211A	Fracture Frame Adapter Bracket
P2222A	Permanent IV Pole
P855E7	Siderail pads (set of four)
P855E7H	Siderail pads (set of two—head end only)

IV Pole (P2217)

⚠ WARNING:
Do not exceed the load capacity of the IV pole. If the IV pole is overloaded, personal injury or equipment damage may occur.

⚠ WARNING:
If the IV pole is installed at the foot end of the bed, make sure the Knee Up/Down controls are locked out. Failure to do so can result in personal injury or equipment damage.

⚠ WARNING:
The head end equipment sockets do not move up and down with the sleep deck. Use appropriate precautions with gravity-sensitive devices such as ventricular drains or lumbar drains before, during, and after operating bed functions. Make sure flow rates on all gravity-fed IVs are correct after bed height adjustment. Failure to correctly manage patient equipment could result in patient injury.

⚠ CAUTION:
When lowering the upper section of an IV pole, always grasp and hold the upper section of the pole before pulling the release knob. Failure to do so may cause equipment damage.

The IV pole is a removable, telescopic pole that installs in any of the sockets at any of the four corners of the bed. The IV pole has a safe working load of 25 lb (11 kg).

To install the IV pole, insert the pole into any of the four sockets. Rotate the pole a quarter turn to lock it into position. Removal is opposite of installation.

NOTE:
Added height recommended for gravity drain applications.

Infusion Support System (P158)

⚠ WARNING:

If the Infusion Support System (ISS) pole is installed at the foot end of the bed, make sure the Knee Up/Down controls are locked out. Failure to do so can result in personal injury or equipment damage.

⚠ WARNING:

Do not exceed the load capacity of the ISS pole. If the ISS pole is overloaded, personal injury or equipment damage may occur.

⚠ CAUTION:

Do not mount infusion pumps on the lower section of an ISS pole. Doing so may cause interference with head section articulation. Equipment damage could occur.

⚠ CAUTION:

When lowering the upper section of an ISS pole, always grasp and hold the upper section of the pole before pulling the release knob. Equipment damage could occur.

The ISS consists of a movable and adjustable IV pole. The pole supports IV pumps or bags in a vertical orientation and raises or lowers the pumps or bags with respect to the system frame. The ISS pole has a safe working load of 20 lb (9 kg).

The head end of the system has attaching points for two mobile ISS. Each ISS can support one infusion pump plus two liters of intravenous solution.

Before installing the ISS pole, it is necessary to install the P163 adapter bracket.

Oxygen Tank Holder, E-Size (P276)

⚠ WARNING:

If the oxygen tank holder is placed at the foot end of the bed, make sure the Knee Up/Down controls are locked out. Failure to do so can result in caregiver, patient, or visitor injury if the foot section fully lowers and the holder becomes dislodged from the bed.

⚠ CAUTION:

Do not exceed the load capacity of the oxygen tank holder. If the oxygen tank is overloaded, personal injury or equipment damage may occur.

The oxygen tank holder attaches to the head end of the base frame in a vertical position. The oxygen tank holder accommodates one **E** size oxygen tank with a regulator. The mounting points are located to let the affixed oxygen tank holder pivot. The safe working load of the oxygen tank hold is 30 lb (14 kg).

To Install

1. Install the mounting bar vertically into a mounting socket at either the head end or foot end of the articulating frame. Make sure the Knee Up/Down control is locked out if installing at the foot end.
2. Place the tank in the holder, and tighten the holder thumbscrew. The thumbscrew keeps the oxygen tank from rotating in the holder.

To Remove

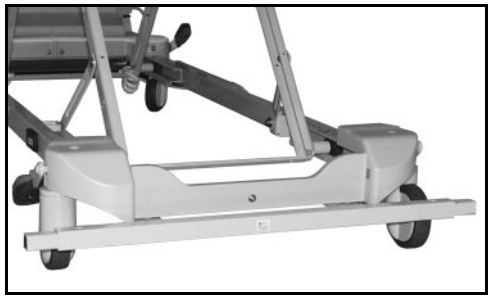
1. Loosen the thumbscrew that holds the tank secure in the holder.
2. Lift the tank out of the holder.
3. Lift up on the tank holder, and remove it from the mounting sockets.

Patient Helper Adapter Bracket (P844E48)

The patient helper adapter bracket (P844E48) is for use with the patient helper.

Refer to the equipment manufacturer's instructions for installation procedures.

Fracture Frame Adapter Bracket (P3211A)



The fracture frame adapter bracket (P3211A) is for use when setting up fracture frame traction equipment.

Refer to the equipment manufacturer's instructions for installation procedures.

Permanent IV Pole (P2222A)

The Permanent IV Pole option consists of one IV pole that supports up to two IV pumps plus bags. The IV pole is attached to the bed frame near the corner of the headboard. The IV pole can support up to 40 lb (18 kg).

⚠ CAUTION:

Do not exceed the 40 lb (18 kg) IV pole weight capacity.

⚠ CAUTION:

Do not mount infusion pumps on the lower section of an IV pole. Interference with head section articulation could result.

To Deploy

1. Lift the IV pole from its stored position behind the headboard and position it straight up.
2. Make sure that the pole drops and locks into position.
3. Raise the upper section of the pole to the desired height. The IV pole is ready for use.

To Store

1. Grasp and hold the upper section of the IV pole. Push the upper collar down, and lower the upper pole section into the lower pole section.
2. Lift the lower section of the IV pole up, and lower the pole down to the stored position behind the headboard. The pole should rest in the storage slot provided on the bed frame.

Siderail Pads (P855E7 and P855E7H)

The siderail pads cover the siderails, but not the siderail controls. The pads are not to be used as restraining devices.

⚠ WARNING:
When the siderail pads are installed, a caregiver's line of sight is greatly impaired. Caregivers should periodically check patients in accordance with facility protocols. Failure to do so could cause patient injury.

⚠ WARNING:
Although siderail pads have been designed to reduce the risk of patient injury, the potential exists for patient entanglement, particularly in agitated or disoriented patients, as well as patients who lack the physical strength to extract themselves if they become entangled. Caregivers should carefully evaluate the need for siderail pads and periodically check patients in accordance with facility protocols for safe positioning.

After the siderail pads are installed, the bed scale **must** be zeroed.

Safety Tips

Bed Positions

⚠ WARNING:
It is recommended that the bed be in the low position when the patient is unattended. This may reduce the severity of any resultant injuries from patient falls.

⚠ WARNING:
When a patient's condition (such as disorientation due to medication or clinical condition) could lead to patient entrapment, the sleep deck should be left in the flat and lowest position while unattended (except when required otherwise by medical staff for special or particular circumstances). Failure to do so could result in patient injury.

⚠ WARNING:
The head end IV poles do not move with the patient platform. Re-verify flow rates on all gravity infusions after bed height adjustment. Failure to re-verify flow rates can result in patient injury.

Brakes

⚠ WARNING:
Unless transporting the patient, always set the brakes when the bed is occupied. Reconfirm that the brakes are set before any patient transfer. Failure to do so may result in personal injury or equipment damage.

Brakes should always be set when the bed is occupied and especially when moving a patient from one surface to another. Patients often use the bed for support when getting out of bed and could be injured if the bed moves unexpectedly. After setting the brakes, push and pull the bed to make sure it is stable.

Siderails/Restraints/Patient Monitoring

⚠ WARNING:
Evaluate patients for entrapment risk according to facility protocol, and monitor patients appropriately.

⚠ WARNING:
Evaluate patients for entrapment risk according to facility protocol, and monitor patients appropriately. Make sure that all siderails are fully latched when in the raised position. Failure to do either of these could result in serious injury or death.

NOTE:
Siderails are intended to be a reminder to the patient of the bed's edges, not a patient-restraining device. When appropriate, Hill-Rom recommends that medical personnel determine the proper methods necessary to make sure a patient remains safely in bed.

Siderails may serve several beneficial uses including providing an edge reminder, bed exit assist, and access to caregiver controls and patient controls. The use of siderails also may provide a sense of security. Siderails should always be in the upright and latched position when the VersaCare™ Bed is in the chair position. The use of siderails in the bed position should be determined according to patient need after assessing any risk factors according to the facility protocols for safe positioning.

When raising the siderails, a **click** indicates that the siderails are completely raised and locked in place. Once the **click** is heard, gently pull on the siderail to make sure it is latched in position.

Siderails are intended to be an edge reminder, not a patient restraining device. Hill-Rom recommends that the appropriate medical personnel determine the level of restraint necessary to make sure a patient will remain safely in bed.

⚠ WARNING:
The Bed Exit Alarm System is not intended as a substitute for good nursing practices. The Bed Exit Alarm System must be used in conjunction with a sound risk assessment and protocol.

⚠ WARNING:
Patient restraints are not intended as substitutes for good nursing practices. Physical restraints, even properly installed, can result in entanglement, physical injury, and death, particularly with agitated and disoriented patients. Monitor patients when using physical restraints in accordance with legal requirements and facility protocol.

1. Develop guidelines for all patients that indicate:
   - Which patients may need to be restrained and the appropriate restraint to utilize.
   - The proper method to monitor a patient, whether restrained or not, including time interval, visual check of restraint, and such.
2. Develop training programs for all caregivers concerning the proper use and application of restraints.
3. Maintain the bed at its lowest position whenever a caregiver is not in the room.
4. Clarify the need for restraint devices to families or guardians.

For restraining devices, consult the restraint manufacturer's instructions for use to verify the correct application of each restraining device.

Electricity

SHOCK HAZARD:
The potential for electrical shock exists with electrical equipment. Failure to follow facility protocol could result in death or serious injury.

⚠ WARNING:
Significant fluid spills onto the bed electronics can result in a hazard. If such a spill occurs, unplug the bed, and remove it from service. Thoroughly clean the bed and allow it to dry; then have the bed checked by service personnel.

⚠ CAUTION:
Before transporting the bed, make sure that the power cord, hoses, and other equipment are properly stowed. Failure to do so could result in equipment damage.

⚠ WARNING:
Improper use or handling of the power cord may result in damage to the power cord. If damage has occurred to the power cord, immediately remove the bed from service, and contact the appropriate maintenance personnel. Failure to do so could result in personal injury or equipment damage.

⚠ WARNING:
If the integrity of the external protective earth conductor is in doubt, operate the bed from its internal electrical power source. Failure to do so could result in personal injury.

⚠ CAUTION:
This device meets all requirements for electromagnetic compatibility per EN 60601-1-2. It is unlikely that the user will encounter problems with this device because of inadequate electromagnetic immunity. However, electromagnetic immunity is always relative, and standards are based on anticipated environments of usage. If the user notes unusual device behavior, particularly if such behavior is intermittent and associated with nearby usage of radio or TV transmitters, cell phones, or electro-surgical equipment, this could be an indication of electromagnetic-interference. If such behavior occurs, the user should try moving the interfering equipment further from this device.

Policies and procedures must be established to train and educate your staff on the risks associated with electric equipment. It is never prudent or necessary for personnel to place any part of their body under or between moving parts of the bed. Whenever a bed is being cleaned or serviced, it should be unplugged from its power source, and the lockouts should be activated to keep the bed from accidentally operating due to the battery backup. Refer to the *VersaCare™ Bed Service Manual* (man333).

Parts and Accessories

Use only Hill-Rom parts and accessories. Do not modify the bed system without authorization from Hill-Rom.

Operating Bed/Surface Precautions

⚠ WARNING:
Do not operate the bed in the presence of flammable gas or vapors. Doing so could result in personal injury or equipment damage.

⚠ WARNING:
Use oxygen administering equipment of the nasal, mask, or ventilator type only or oxygen tents that can be contained inside the siderails. Failure to do so could result in personal injury or equipment damage.

⚠ WARNING:
During articulation of the bed functions, a static buildup may occur.

⚠ WARNING:
Operate the bed within the stated environmental conditions, see “Environmental Conditions for Use” on page 60. Failure to do so could result in patient injury or equipment damage.

Transport

⚠ CAUTION:

Before transporting the bed, make sure that the power cord, hoses, and other equipment are properly stored. Failure to do so could result in equipment damage.

⚠ CAUTION:

Do not push or pull the bed by IV poles, siderails, or other equipment. Use the transport handles, headboard, footboard, or other designated locations. Failure to do so could result in equipment damage.

The VersaCare™ Bed is intended to be used to transport patients with the foot end of the system forward. Prior to transport, properly stow the power cord to prevent tripping. Take care to prevent damage to the AC power cord. An electrical shock hazard exists. Use only the headboard, transport handles (if installed) or the footboard to move the bed.

Make sure the patient, equipment, and all lines are securely placed within the perimeter of the bed for intra-hospital transport. The VersaCare™ Bed is not intended to be used to transport a patient in the Chair position.

Fully extended IV poles could impact doorways or ceiling fixtures. Lower poles prior to patient transport.

After transport make sure that the Nurse Call system cables are properly connected.

Sleep Surface/Mattress

⚠ WARNING:

Some safety features of the VersaCare™ Bed may not function or may not operate as intended with surfaces manufactured by other companies. Check with the surface manufacturer to determine those safety features of the bed that have been tested and verified to work properly with the replacement surface. Failure to do so could result in serious personal injury or damage to equipment.

NOTE:

Hill-Rom recommends the use of Hill-Rom surfaces that have been designed and tested specifically for the VersaCare™ Bed. Customers electing to purchase replacement surfaces from other manufacturers should confirm that the replacement surface, when used in conjunction with the VersaCare™ Bed, meets applicable regulations, regulatory guidance and technical standards and does not create unacceptable risks of injury to patients or caregivers. Specifically, Hill-Rom suggests that surfaces utilize dimensions and construction to minimize gaps where entrapment could occur, provide for sufficient height between the surface and the top of the siderail to prevent accidental roll-over events, provide appropriate firmness at the edges of the surface to facilitate safe transfers into and out of the bed, and do not interfere with the proper operation of siderails.

⚠ WARNING:

Do not use mattress overlays while in the chair position. Patient injury or equipment damage may occur.

⚠ WARNING:

Sleep surface impermeability could be affected by needle sticks. Caregivers should be instructed to **avoid** punctures caused by improper use of x-ray cassette holders and/or needle sticks. Failure to do so could result in cross-infection and patient injury.

The sleep surface should be regularly inspected for punctures, rips, tears, or other such damage. Replace the surface as necessary.

Flammability

⚠ WARNING:

Patients should not be allowed to smoke in bed. Sheets and pillows generally do not have flame retardance properties. Personal injury or equipment damage could occur.

Reduce the possibility of fires by observing fire prevention rules and regulations.

The sleep surface mattress meets the following specifications:

- CAL TB-117, *Requirements, Test Procedure and Apparatus for Testing the Flame Retardance of Resilient Filling Materials Used in Upholstered Furniture* (foam)
- 16 CFR 1632, *Standard for the Flammability of Mattresses and Mattress Pads*
- CAL TB-129, *Flammability Test Procedures for Mattresses for Use in Public Buildings* (models with fire barrier only)
- BFD IX-II, *Boston Fire Department Mattress Fire Test* (models with fire barrier only)

Bed Articulations

Do not operate bed controls until all persons and equipment are clear of mechanisms. To stop a function, release the control, and/or activate the opposite function, and/or immediately unplug the AC power cord.

Observe lines closely during articulations. Always use good line management techniques, particularly as the head section rises.

Chair Positioning

Always set the brakes before placing the bed in a chair position. Observe lines closely during head up/down and chair articulation.

Make sure equipment and personnel are clear of the foot end of the bed especially if the footboard is removed.

Visitor Notification

Instruct visitors not to attempt operation of caregiver controls. They may assist the patient with patient controls.

Cleaning

⚠ WARNING:
Follow the product manufacturer’s instructions. Failure to do so could result in personal injury or equipment damage.

SHOCK HAZARD:
The potential for electrical shock exists with electrical equipment. Failure to follow facility protocol could result in death or serious injury.

SHOCK HAZARD:
Unplug the bed from its power source. Failure to do so could result in personal injury or equipment damage.

SHOCK HAZARD:
Do not expose the bed to excessive moisture. Personal injury or equipment damage could occur.

⚠ CAUTION:
Do not use harsh cleansers, solvents, or detergents. Equipment damage could occur.

General Cleaning

We recommend that you clean the bed with detergent and warm water. Do not use excessive liquid or harsh cleansers.

Steam Cleaning

Do not use any steam cleaning device on the bed. Excessive moisture can damage mechanisms in this bed.

Cleaning Hard to Clean Spots

To remove difficult spots or stains, we recommend that you use standard household cleansers and a soft bristle brush. To loosen heavy, dried-on soil, you may first need to saturate the spot.

Disinfecting

When there is visible soilage and also between patient use, we recommend that you disinfect the bed using an EPA registered (US only), tuberculocidal disinfectant.

Dilute and use the disinfectant as specified on the manufacturer's label.

Preventive Maintenance

⚠ WARNING:
Only facility-authorized personnel should service the VersaCare™ Bed. Servicing performed by unauthorized personnel could result in personal injury or equipment damage.

The VersaCare™ Bed requires an effective maintenance program. We recommend that you perform annual preventive maintenance (PM) and testing for Joint Commission on Accreditation of Healthcare Organizations (JCAHO). PM and testing not only meet JCAHO requirements but will help make sure of a long, operative life for the VersaCare™ Bed. PM will minimize downtime due to excessive wear. For the preventive maintenance schedule, refer to the *VersaCare™ Bed Service Manual* (man333).

Perform annual preventive maintenance procedures to make sure all VersaCare™ Bed components are functioning as originally designed. Pay particular attention to safety features, including but not limited to the following:

- Siderail latching mechanisms
- Caster braking systems
- Electrical system components
- Electrical power cords for fraying, damage, and proper grounding
- All controls return to off or neutral position when released
- Controls or cabling entanglement in system mechanisms or siderails
- Proper operation of the lockout controls
- Integrity of sleep surface ticking

VersaCare™ Bed Main Battery

Replace the battery if any of the following conditions exist:

- The battery indicator does not light within 2 hours of bed connection to AC power.
- The battery indicator does not stop flashing (low condition) within 12 hours of bed connection to AC power.

IntelliDrive® Transport System Batteries

Replace the batteries if the IntelliDrive® Transport System automatically shuts down power before the final battery charge indicator flashes (refer to the *VersaCare™ Bed Service Manual* (man333).

After replacing the batteries, charge them for a minimum of 20 hours before use.

NOTE:
Follow instructions on the batteries for proper disposal or recycling.

Troubleshooting

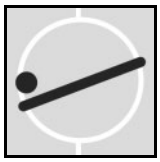
⚠ WARNING:
Only facility-authorized personnel should troubleshoot the VersaCare™ Bed. Troubleshooting by unauthorized personnel could result in personal injury or equipment damage.

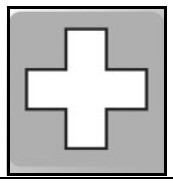
Always check the battery charge status on the power supply enclosure. The bed may not be functioning due to the battery being drained, and the bed needing to be plugged into an appropriate power source.

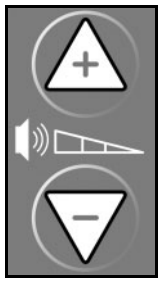
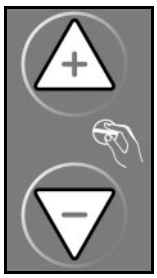
Product Symbol Definition

The following symbols are used on the VersaCare™ Bed:

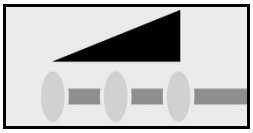
Symbol	Description
	Type B applied part according to IEC 60601-1 (UL 60601-1).
IPX4	According to IEC 60529, rating for protection against fluid ingress and identified as equipment that is protected against spraying and splashing water.
	CAUTION: Consult accompanying documents.
[a]	Medical Electrical Equipment Classified By Underwriters Laboratories Inc. with respect to Electric Shock, Fire, and Mechanical Hazards only in accordance with UL60601-1, CAN/CSA C22.2 No. 601.1, EN60601-1, IEC60601-1-2-38 and IEC60601-1-4.
	CPR/Emergency Trendelenburg Control—Activates the CPR function and the Emergency Trendelenburg position.
	Bed Up/Down control—Raises and lowers the bed.
	Head Up/Down control—Raises and lowers the head section of the bed.

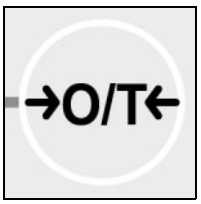
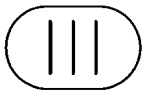
Symbol	Description
	Knee Up/Down control—Raises and lowers the knee section of the bed.
	Battery control—Activates the battery. Indicates battery charge status.
	Enable control—Enables all controls not inside the blue areas on the head end siderails.
	Trendelenburg control—Activates the Trendelenburg function on the bed.
	Reverse Trendelenburg control—Activates the Reverse Trendelenburg function on the bed.
	Chair control—Activates the Chair function on the bed.
	Bed Flat control—Places the sleep deck in a flat position.
	Foot Retract/Extend controls—Retracts or extends the foot section of the bed.

Symbol	Description
	All Motors Lockout control—Locks out or unlocks bed articulation functions.
	Knee Up/Down lockout—Locks out the Knee Up/Down function.
	Head Up/Down lockout—Locks out the Head Up/Down function.
	Bed Up/Down lockout—Locks out the Bed Up/Down function.
	Nurse Call control—Sends a Nurse Call to the nurses station.
	Room Light control—Turns the room light off and on. (Patient control pendant only)
	Reading Light control—Turns the reading light off and on. (Patient control pendant only)

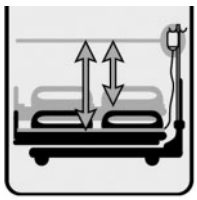
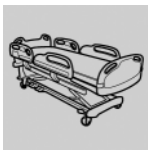
Symbol	Description
	Music control—Turns the radio station on and off. (Patient control pendant only)
	Television control—Turns the television on and off. (Patient control pendant only)
	Volume control—Raises or lowers the volume of the television or radio. (Patient control pendant only)
	Channel/Station Up/Down control—Changes the television channel or radio station up or down. (Patient control pendant only)
	Max-Inflate mode—Inflates the treatment surface into Max-Inflate. (Only available on beds with a treatment surface)
	Turn Assist Mode, left—Turns the patient onto the patient's left side. (Only available on beds with a treatment surface)

Symbol	Description
	Pressure Relief Mode—Places the treatment surface into pressure relief mode. (Only available on beds with a treatment surface)
	Turn Assist Mode, right—Turns the patient onto their right side. (Only available on beds with a treatment surface)
	Siderail Not Up Indicator—Flashes when a patient is being turned towards a siderail that is not up.
	Alarm Volume control—Adjusts the local alarm volume level of the Bed Exit Alarm System. Bed Exit Alarm System Tone Control—Changes the audible tone of the Bed Exit Alarm System.
	Patient Position Mode/Patient Movement mode—Alarms when a patient moves towards either siderail or moves away from the head section, such as sits up in bed.
	Bed Exiting mode—Alarms when a patient moves away from the center of the bed towards an exit point.

Symbol	Description
	Out-of-Bed mode—Alarms when the patient's weight shifts significantly off the frame of the bed.
	Alarm Volume indicator—Shows the local alarm volume level setting of the Bed Exit Alarm System.
	Bed Exit Alarm System Deactivation Instruction—Shows the sequence to deactivate the Bed Exit Alarm System.
	Scale Weigh control—Operates the scale feature on the bed. If the scale feature is enabled, the patient weight will show on the display.
	Zero control—Zeroes the scale (Non-OIML scale beds only).
	Closed Captioning control—Turns on or off the closed captioning capability of a television. (Patient control pendant only)
	Patient Hip Position Locator—Shows the optimal patient placement on the bed.

Symbol	Description
	Bed Not Down indicator—Illuminates when the bed is not in the full down position. Flashes when the obstacle detect system detects an obstacle in the travel path of the upper bed frame.
	Service Required indicator—Flashes to indicate a bed malfunction.
	Zero/Tare control—Zeroes/Tares the OIML scale. (OIML scale beds only)
	Weight Stable indicator—Illuminates when the scale is stable (OIML scale beds only)
	Do Not Use with Oxygen Tents—Indicates the use of oxygen administering equipment of the nasal, mask, or ventilator type only or oxygen tents that can be contained inside the siderails.
	Black M on **green** background—Signifies the scale (OIML only) is certified to weigh in certain positions.
	Scale class identifier—Identifies the OIML scale as Class III.

Symbol	Description
	Electric shock hazard
	Verband Deutscher Electrotchniker (VDE) Certified Unit
	Alternating current
	Identifying mains fuse.
	Conforms to the European Medical Device Directive 93/42/EEC for a device that has a measuring function (for beds with scale).
	Conforms to the European Non-Automatic Weighing Instrument Directive 90/384/EEC.
	Conforms to the European Medical Device Directive 93/42/EEC
	Safe Working Load—Indicates the safe working load of the bed.

Symbol	Description
	Demko Certified Unit
	Shows there is a pinch point under the foot section.
	Shows the head end IV poles remain stationary in height when the sleep surface is raised or lowered.
	Indicates when the Nurse Call speaker is active.
	Indicates when the Nurse Call microphone is active.
	Bed Exit Alarm System Zero control—Zeroes the Bed Exit Alarm System on beds without a scale. (B model and newer beds)
	Empty bed—Reminder to make sure the patient is not in the bed when zeroing the bed.

a. The UL logo is a registered trademark of Underwriter's Laboratories, Inc.

Specifications

Product Identification

Product Number	Description
P3200 and P3201	VersaCare™ Bed

Dimensions

Feature	Dimension
Total Length:	
Foot Section Extended	94.5" (240.0 cm) 97.5" (248.0 cm) with P844E48 installed 96.5" (245.0 cm) with P3211A installed
Foot Section Retracted	82.5" (210.0 cm) 85.5" (217.0 cm) with P844E48 installed 84.5" (215.0 cm) with P3211A installed
Maximum Width (siderails stored)	37" (94 cm)
Maximum Width (siderails up)	40" (102 cm)
Maximum Headboard Height	39.5" (100 cm)
Mattress to Siderail Height	9.5" (24 cm)
Minimum Under-Bed Clearance	3" (8 cm) 1.25" (3.18 cm) for IntelliDrive® Transport System beds
Wheel Base	26.75" x 62" (67.95 cm x 157.48 cm)
Surface Dimensions:	
Surface Width	35.5" (90 cm)
Surface Length	86.4" (219.5 cm)
Surface Mattress Thickness	8" (20 cm) (measured in the center of the mattress)
Surface Weight	25 lb (11 kg) for treatment, 26 lb (12 kg) for prevention foam
Alternate mattresses: Recommended height above the mattress at the deck perimeter to the top of the siderail, per IEC 60601-2-38	8.7" (220 mm)
Caster Size	5" (13 cm) standard, or 6" (15 cm) for IntelliDrive® Transport System beds
Total Weight without surface	495 lb (224 kg)

Specifications

Feature	Dimension
Head Section Inclination (maximum)	65°
Knee Section Inclination (maximum)	16°
Foot Section Inclination (maximum)	-27°
Bed Height Range, Lowest Position (with mattress)	18" (46 cm) without IntelliDrive® Transport System 22" (56 cm) with IntelliDrive® Transport System

Feature	Dimension
Bed Height Range, Highest Position (with mattress)	37" (94 cm) without IntelliDrive® Transport System 38" (97 cm) with IntelliDrive® Transport System
Trendelenburg Position (maximum)	15°
Reverse Trendelenburg Position (maximum)	10°
Bed Lift Capacity (safe working load) (includes patient weight, mattress, IV poles, and such)	550 lb (249 kg)
Siderail Opening Size	3.5" (8.9 cm)

Nurse Call Connection Requirements

For information about the Nurse Call connection requirements, refer to the *SideCom® Communication System Design and Application Manual* (ds059).

Environmental Conditions for Transport and Storage

Condition	Range
Temperature	-40°F to 158°F (-40°C to 70°C)
Relative Humidity	95% non-condensing
Pressure	50 kPa to 106 kPa

Environmental Conditions for Use

Condition	Range
Temperature	50°F to 94°F (10°C to 35°C) ambient temperature
Relative Humidity Range	20% to 85% non-condensing
Atmospheric Pressure	70 kPa to 106 kPa

AC Power Requirements

Nominal Power Distribution Voltage (Volts)	Nominal Power Distribution Frequency (Hertz)	Maximum Equipment Current (Amps)
120 (P3200)	60	6.0[a]
100/110/115/120/127 (P3201)	50/60	6.0
220/230/240 (P3201)	50/60	3.0

a. North American power supply configuration.

Fuse Specifications

There are no user accessible fuses. Refer to the *VersaCare™ Bed Service Manual* (man333) for fuse ratings and replacement procedures.

European Mattress Flammability Codes

Condition	Range
P3251A and P3250EA	BS 7177: 1996, Specification for Resistance to Ignition of Mattresses, Divans and Bed Bases **(Surfaces Only)**
	BS 5852: 1990, Assessment of Ignitability of Upholstered Seating by Smouldering and Flaming Ignition Sources **(Surfaces and Siderail Coverings Only)**
	BS EN 597-1: 1995, Furniture - Assessment of the Ignitability of Mattresses and Upholstered Bed Bases; Part 1: Ignition Source: Smouldering Cigarette **(Surfaces and Siderail Coverings Only)**
	BS EN 597-2: 1995, Furniture - Assessment of the Ignitability of Mattresses and Upholstered Bed Bases; Part 2: Ignition Source: Match Flame Equivalent **(Surfaces and Siderail Coverings Only)**
	BS 6807: 1996, Methods of Test for Assessment of the Ignitability of Mattresses, Upholstered Divans and Upholstered Bed Bases with Flaming Types of Primary and Secondary Sources of Ignition **(Surfaces and Siderail Coverings Only)**

Classification and Standards

The VersaCare™ Bed is designed and manufactured according to the following equipment classifications and standards:

Technical and Quality Assurance Standards	UL 60601-1 CSA®[a] C22.2 No. 601.1 IEC 60601-2-38 EN 60601-1 IEC 60601-1-2 IEC 60601-1-4 EN ISO 9001 and EN 13485
Equipment Classification per IEC 60601-1	Class I equipment, internally powered equipment
Degree of Protection Against Electric Shock	Type B
Classification according to Directive 93/42/EEC	Class I, Class IIa for treatment
Degree of Protection Against Ingress of Water	IPX4
Degree of Protection Against the Presence of Flammable Anaesthetic Mixtures	Not for use with flammable anaesthetics
Mode of Operation	Continuous operation with intermittent loading, 3 minutes ON/30 minutes OFF
Sound Level (measured 1 meter from patient's ear)	< 52 dBA < 73 dBA with IntelliDrive® Transport System active

a. CSA® is a registered trademark of Canadian Standards Association, Inc.

Electromagnetic Emissions Guidance

Guidance and Manufacturer's Declaration—Electromagnetic Emissions		
The VersaCare™ Bed model P3200/P3201 is intended for use in the electromagnetic environment specified below. The customer or the user of the model P3200/P3201 should make sure it is used in such an environment.		
Emissions Test	**Compliance**	**Electromagnetic Environment—Guidance**
RF emissions CISPR 11	Group 1	The model P3200/P3201 uses RF energy only for its internal functions. Therefore, its RF emissions are low and are not likely to cause any interference in nearby electronic equipment.
RF Emissions CISPR 11	Class A	The model P3200/P3201 is suitable for use in all establishments other than domestic and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic Emissions IEC 61000-3-2	Not Applicable	
Voltage Fluctuations/ Flicker Emissions IEC 61000-3-3	Not Applicable	

Electromagnetic Immunity Guidance

Guidance and Manufacturer's Declaration - Electromagnetic Emissions			
The VersaCare™ Bed model P3200/P3201 is intended for use in the electromagnetic environment specified below. The customer or the user of the model P3200/P3201 should make sure it is used in such an environment.			
Immunity Test	**IEC 60601 Test Level**	**Compliance Level**	**Electromagnetic Environment—Guidance**
Electrostatic Discharge (ESD) IEC 61000-4-2	± 6 kV Contact ± 8 kV Air	± 6 kV Contact ± 8 kV Air	Floors should be wood, concrete, or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Radiated RF IEC 61000-4-3	3 Vrms 80 MHz to 2.5 GHz	3 Vrms 80 MHz to 2.5 GHz	Portable and mobile RF communications equipment should not be used at close distances to the P3200/P3201 bed. (See Note 2)
Electrical Fast Transient/Burst IEC 61000-4-4	± 2 kV on Power Supply Lines ± 1 kV on Input/ Output Lines	± 2 kV on Power Supply Lines ± 1 kV on Input/ Output Lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	± 1 kV Differential Mode (line-line) ± 2 kV Common Mode (Line-Ground)	± 1 kV Differential Mode (line-line) ± 2 kV Common Mode (Line-Ground)	Mains power quality should be that of a typical commercial or hospital environment.
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz	3 Vrms 150 kHz to 80 MHz	Portable and mobile RF communications equipment (cell phones) should not be used at close distances to the P3200/P3201 bed. (See Note 2)
Power Frequency Magnetic Fields IEC 61000-4-8	3 A/m	3 A/m	The power frequency magnetic field should be measured in the intended installation location to assure it is sufficiently low.
Voltage Dips, Short Interrupts, and Variations On Power Supply Lines IEC 61000-4-11	< 5% U_T (95% dip in U_T for 0.5 cycles) < 40% U_T (60% dip in U_T for 5 cycles) < 70% U_T (30% dip in U_T for 25 cycles) < 5% U_T (95% dip in U_T for 5 seconds) (See Note 1)	< 5% U_T (95% dip in U_T for 0.5 cycles) < 40% U_T (60% dip in U_T for 5 cycles) < 70% U_T (30% dip in U_T for 25 cycles) < 5% U_T (95% dip in U_T for 5 seconds)	Mains power quality should be that of a typical commercial or hospital environment. If operation is required during an extended power outage or interruption, the model P3200/P3201 should be switched to operate from the backup battery.
Note 1: U_T is the AC mains voltage prior to application of the test level.			
Note 2: The compliance levels in the ISM frequency range 150 kHz to 2.5 GHz are intended to decrease the likelihood that mobile/portable communications equipment could cause interference if it is inadvertently brought into the patient area. However, emission limits, IEC 60601 test levels, and tests specified in IEC 60601-1-2:2001 do not address electromagnetic compatibility of electrical equipment at very close distances. Care should always be exercised when using any electrical or RF equipment in the immediate patient area.			

Hill-Rom
A HILLENBRAND INDUSTRY

Global Headquarters
Hill-Rom Company, Inc.
1069 State Route 46 E
Batesville, IN 47006-9167
Tel: 800-445-3720
www.hill-rom.com

USA Rental Therapy
Hill-Rom Company, Inc.
4349 Corporate Road
Charleston, SC 29405
Tel: 800-638-2546

St. Paul, MN USA
Hill-Rom Company, Inc.
1020 W. County Road F
St. Paul, MN 55126
Tel: 651-490-1648 or 800-426-4224
www.thevest.com

Belgique / België
Distribal
Admiral De Boisot Straat 19-21
2000 Antwerpen
Tel: +32 (0)32 38 43 15
Fax: +32 (0)32 16 06 86

Canada
Hill-Rom Canada
5444 Timberlea Blvd.
Mississauga, Ontario
Canada L4W 2T7
Tel: 800-267-2337

Deutschland
Hill-Rom GmbH
Franz-Rennefeld-Weg 4
40472 Dusseldorf
Tel: +49 (0)211 16450 0
Fax: +49 (0)211 16450 182

Ellás
Meditime
Nikolaos Chatziioannidis
Egnatia 142 Str
54622 Thessaloniki
Tel: +30 2310 263300
Fax: +30 2311 263329

España
Hill-Rom Iberia S.L.
C/ Comerc, n° 2-22, Nave n° 14
Poligno Industrial EL PLA
08980 Sant Feliu de Llobregat
(Barcelona) - SPAIN
Tel: +34 (0)93 685 6009
Fax: +34 (0)93 666 5570

France
Hill-Rom SAS
Z.I. du Talhouët, BP 14
56330 Pluvigner
Tel: +33 (0)2 97 50 92 12
Service France: +33 (0)820 01 23 45
Fax: +33 (0)2 97 50 92 00

Ireland
Hill-Rom Ltd.
Unit 1 - Kilcarberry Business Park
Nangor Road
Dublin 22
Tel: +353 (0)1 413 6005
Fax: +353 (0)1 413 6030
dublin.sales@hill-rom.com

Italia
Hill-Rom S.p.A.
Via Ambrosoli 6
20090 Rodano
Tel: +39 (0)02 / 950541
Fax: +39 (0)02 / 95328578

Nederland
Hill-Rom Medical Services BV
Hagenweg 1c
Postbus 173
4130 ED Vianen
Tel: +31 (0)347 / 32 35 32
Fax: +31 (0)347 / 32 35 00

Nordic Region
Hill-Rom AB
Ekbacksvägen 20
168 69, Bromma
Sweden
Tel: +46 (0)8 564 353 60
Fax: +46 (0)8 564 353 61
se.marketing@hill-rom.com

Österreich
Hill-Rom Austria GmbH
Bueropark Donau / Haus 8
3400 Klosterneuburg
Tel: +43 (0)2243 / 28550
Fax: +43 (0)2243 / 28550-19
austria@hill-rom.com

Portugal
Hill-Rom Iberia S.L.
C/ Comerc, n° 2-22, Nave n° 14
Poligno Industrial EL PLA
08980 Sant Feliu de Llobregat
(Barcelona) - SPAIN
Tel: +34 (0)93 685 6009
Fax: +34 (0)93 666 5570

Suisse / Schweiz
Hill-Rom SA
Chemin du Vallon 26
1030 Bussigny
Tel: +41 (0)21 / 706 21 30
Fax: +41 (0)21 / 706 21 33
hrch.info@hill-rom

United Kingdom
Hill-Rom Ltd.
Clinitron House
Ashby Park
Ashby de la Zouch
Leicestershire LE65 1JG
Tel: +44 (0)1530 411000
Fax: +44 (0)1530 411555

International
Hill-Rom Company, Inc.
International Department
1069 State Route 46 East, J55
Batesville, Indiana 47006 USA
Tel: +1 (0)812 934 8173
Fax: +1 (0)812 934 7191
www.hill-rom.com
international@hill-rom.com